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ABSTRACT

A summary of the content of a national conference on career education as a cooperative effort is presented in this report. Included are descriptions of career education practices now in existence, summaries of sessions related to conceptual efforts and technical skills required for career education, and comments from various critics of career education. Four major sections comprise the report: (1) Summaries of speeches made during the conference's four general sessions; (2) articles written by reporters (for the most part, college journalism students) on selected concurrent sessions; (3) synopses of most sessions not covered by reporters, based on abstracts submitted by the presenters for these sessions; and (4) a list of the majority of the presenters at the conference, listed according to session theme or clustered according to the area of concern addressed. These clusters included: Career Education by Levels and Settings; Career Education by Function; Career Education by Special Population Groups; Educational Skills and Approaches; Career Education Community Resources; and Career Education Concepts. (BL)

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report on

COMMISSIONER'S NATIONAL CONFERENCE ON CAREER EDUCATION

Houston, Texas · November 7-10, 1976

CAREER EDUCATION:

A Collaborative Effort

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Foreword

The Commissioner's National Conference on Career Education was an historic event. This *Report* represents an attempt to summarize, insofar as possible with limited resources, the content of the conference. Included are descriptions of what, in the opinion of practitioners, are some of the very best career education practices now in existence. Equally important, summaries of sessions related to conceptual efforts and technical skills required for career education are to be found. Finally, a conscientious attempt has been made to include summary comments from various critics of career education. It seems safe to say that this *Report* represents the most comprehensive collection of career education practices, concepts, and problems ever assembled in a single document.

The conference, itself, was truly a national event. The idea for the conference came from local K-12 career education coordinators participating in "Mini-Conference #14" sponsored by the Office of Career Education in July 1974. These career education practitioners voiced a need to interact with their counterparts throughout the United States. They felt they had much to share and much to learn from such interaction. Their dream was to gather together all kinds of "actors" in career education–teachers, counselors, administrators, business/industry personnel, representatives from organized labor, parents, students, and government–for purposes of improving the expertise of each. The conference itself represented an attempt to convert their dream into reality.

The Office of Education, under the direction of then Commissioner Dr. Terrel H. Bell, negotiated a contract with the Greater Houston Education Foundation, calling for that foundation to conduct the conference. Staff members of the foundation, headed by T.S. Hancock, devoted many, many hours to the organizational and operational tasks associated with a conference of this magnitude. Their efforts extended considerably beyond the minimal requirements of the contract.

Major credit for both attracting conference attendees and conference presenters must go to two groups. First, the 47 national cooperating organizations must be recognized. Each accepted an invitation from Commissioner Bell to serve in this capacity. They sent representatives who made valuable suggestions regarding conference content and organization to planning meetings called by the foundation. Most also contributed through suggesting conference presenters representing their organizations. Many made further valuable contributions through alerting their members to the conference and encouraging their attendance.

The second key group involved was the State Coordinators of Career Education in the 50 States. Almost without exception, they formed State Program Planning Advisory Committees and, through those committees, identified and selected program presenters. On two occasions, they met as a total group with representatives of the foundation to coordinate program planning efforts. More than any other single group, it was the State Coordinators of Career Education who were responsible for the quality of programs presented and for the extremely large attendance. Most are already at work following up this national conference with State efforts.

A great deal of credit must go to Dingle Associates, Inc.–and particularly to Ms. Sherry Kapfer–for all of the work involved in producing this *Report.* Ms. Kapfer and her associates have done everything possible to include the broadest and most accurate coverage of the conference. Only budget constraints prevented them from doing even more. They have cooperated with staff members in OCE and with both the foundation and the State Coordinators in every way they possibly could.

This Foreword would be incomplete indeed if I failed to recognize and express sincere thanks to Dr. Corinne Rieder, Associate Director, Education and Work Group, National Institute of Education. Dr. Rieder made arrangements so that NIE could provide the funds, as well as technical assistance, required for preparation of this *Report.* Without Dr. Rieder's help, this *Report* could not have been produced. It stands as one more example of the close and warm professional relationships OE's Office of Career Education is privileged to enjoy with the Education and Work Group of NIE.

Finally, thanks must certainly go to those persons who presented and those who attended the conference. No presenter was paid either an honorarium or travel expenses by the foundation. The difficulties that many, many people encountered both in finding the necessary funds and in getting to the conference would, if chronicled, be in themselves a striking example of the strong commitment people have to career education.

I hope that you, the reader, will find this *Report* helpful in increasing your knowledge in the area of career education. If you find even one idea here that will help you deliver more effective career education where you are, it will have been worthwhile.

Kenneth B. Hoyt
Director of Career Education
U.S. Office of Education

Preface

The Commissioner's National Conference on Career Education could not have been held at a more appropriate time. It was the Bicentenary year of our nation, and the conference demonstrated the enduring contribution of education to the life of our country. Secondly, interest in career education has never been greater than at the present time. The entry of more and more women into the work force, the slowdown in the economy, and the changing demography of our population have created massive public interest in the whole relationship between education and work.

The National Institute of Education was pleased to be part of this enterprise through a grant of $50,000 for the preparation of this volume. I hope that wide dissemination of the conference proceedings will help alert teachers and administrators to the remarkable diversity in career education practice and its growing usefulness.

Corinne H. Rieder
Associate Director
Education and Work Group
National Institute of Education

Organization of This Report

This report has been compiled from various sources of information and is divided into four major sections.

Section I presents summaries of speeches made during the conference's four general sessions. Articles in Section I are based on the prepared texts of speakers' remarks (when available), supplemented by personal reporting coverage.

Section II contains articles written by reporters (for the most part, college journalism students) on selected concurrent sessions.

Section III provides synopses of most sessions not covered by reporters. These articles are based on abstracts submitted by the presenters for these sessions. (It should be noted that in some instances where reporters were not assigned to sessions, it was not possible to provide coverage of the session because the presenters failed to submit an abstract.)

Section IV is a list of the majority of the presenters at the conference. This list was compiled from (1) information submitted on abstracts, (2) reporters' notes, (3) the alphabetized list of registrants provided by the conference management contractor, (4) a preliminary proposed list of presenters compiled by the conference management contractor, and (5) information collected from presenters to identify people appearing in photographs in this report.

Dingle Associates, Inc. realizes that some of this information may be incomplete and we regret any errors or omissions. However, we have made every effort to ensure as much accuracy as possible.

Section I

Reagan, Welch, Hoyt Welcome Conferees

Dr. T.S. Hancock, Chairman, Commissioner's National Conference on Career Education, left, receives award for outstanding contributions to career education from Mr. Billy R. Reagan, General Superintendent of the Houston Independent School District.

At the opening general session of the conference, Mr. Billy R. Reagan, General Superintendent of the Houston Independent School District, welcomed participants to the conference and spoke of the progress made by career education in the last six years.

"Nearly six years ago, Dr. Sidney P. Marland, Jr., then U.S. Commissioner of Education, launched the career education movement at the National Association of Secondary School Principals' convention in January 1971 in Houston," Mr. Reagan began. "Now this movement has much more force and impact."

Challenging participants to examine the mission of the conference carefully and to work toward better business-labor-industry-education partnerships, Mr. Reagan forecast a quantum jump for the career education movement in the next six years.

Following the presentation of awards for their contributions to the career education field to Dr. Marland, Dr. Terrel Bell (Former U.S. Commissioner of Education), Dr. Kenneth B. Hoyt (Director, Office of Career Education, U.S. Office of Education), and Dr. T.S. Hancock (Chairman, Commissioner's National Conference on Career Education), conferees heard remarks from Mr. Louie Welch, President, Houston Chamber of Commerce.

"Career education represents a solution to a problem that is vital to America," Mr. Welch commented.

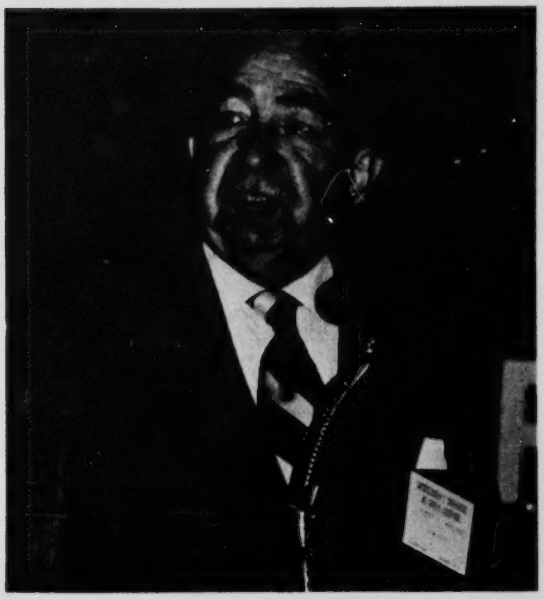
Emphasizing the importance of career skills and proper career awareness and preparation, Mr. Welch said he hoped that participants would obtain from the conference an increased awareness of solutions to problems of both this generation and generations to come.

Dr. Hoyt then introduced Dr. Marland to conference participants.

"When Sid Marland was the U.S. Commissioner of Education, he introduced the concept of career education as a bona fide notion in January 1971," Dr. Hoyt began. "Under his leadership, the movement has come a long, long way. Now, as President of the College Entrance Examination Board, Dr. Marland is continuing this leadership role in further conceptualization and implementation of career education. To speak on the topic of career education revisited, no one could be more appropriate than Dr. Sidney P. Marland, Jr."

Mr. Louie Welch, President, Houston Chamber of Commerce

Marland Calls for Collaborative Educational Reform



Dr. Sidney P. Marland, Jr., President, College Entrance Examination Board

Dr. Sidney P. Marland, Jr., formerly U.S. Commissioner of Education and currently President of the College Entrance Examination Board, delivered the keynote address at the opening general session of the conference.

Noting that career education is not now a new idea nor was it in 1971, Dr. Marland stressed that career education has been an "underlying concept of civilized people's self-development since the beginning—that is, growing up to work."

He commented that career education's message represents a call for reform, emphasizing the idea that education has an essential role, at all grades and for all ages, in helping people ready themselves for work.

"The reform applies to the schools and colleges, but it also asks for reform from those other places that contribute so much to the education of our people *outside* the classrooms," he said. "It asks for new commitments from business, labor, and industry—from governments at Federal, State, and local levels. It asks for a larger order of humaneness from the American people altogether as they attempt to enlighten the lives of others, especially the young, through better education—not only that which happens in schools and colleges."

Quoting the official policy of the U.S. Office of Education (developed by Dr. Kenneth B. Hoyt, Director, Office of Career Education) regarding the relationship of work to education, namely that "Career education is the totality of experiences through which one learns about and prepares to engage in work as part of his or her way of living," Dr. Marland commented that one of the first goals of this philosophy is to make the idea of work understandable, even by very young children in elementary schools, so that they can know more about themselves, their aptitudes, and their competencies for work.

Cautioning against isolating work from learning or labor from the liberal arts, Dr. Marland then turned to the importance of a collaborative relationship among all segments of society in career education.

Business

Dr. Marland cited the following reasons for business to be a major collaborator in career education:

1. Career education helps develop better manpower for the operational needs of business.
2. Career education creates an improved environment for business work force and facilities by reducing unemployment, welfare, etc.
3. Career education improves the purchasing power of the consumer to buy goods and services produced by business.

He also noted that there is a new sense of "selfless social concern" on the part of business to make a better and fuller life for people in our society.

Extolling the virtues of work experience as a part of the high school curriculum, with costs incurred by businesses to be reimbursed by the schools, Dr. Marland stated, "This does not foreclose the appropriateness of cooperative work programs for pay, for work-study arrangements, or for paid apprenticeship training. These and other opportunities for earning while learning would follow the work laboratory requirement which could be fulfilled during any of the high school years."

Labor

Dr. Marland noted that since its beginning the American labor movement has been a champion of education for all, but that often business and education have tended to bypass labor. Stressing that students must not be allowed to displace mature workers, Dr. Marland urged that labor be made a part of career education design at the very outset.

He commented that labor, like business, has been

concerned about education and preparing young people for work for a long time, dating back to the ancient craft guilds.

"If there is reluctance on the part of organized labor in some quarters to join in this reform—which not only calls for reform of business and industry and education, but reform of labor itself—it is very probable that labor has not been sought out on an equal footing from the start to share in finding the solutions," Dr. Marland said.

Industry

Next, Dr. Marland turned to the topic of industry, noting that it is somewhat difficult to separate industry from business and labor. Viewing industry as often having a larger sphere of community or national influence and a larger service area, Dr. Marland said that he sees industry as different from business only in its role as a producer of goods and services in companionship with labor, and cited General Motors and the Bell System as examples of industries with specific career education programs.

Government

Commenting that Federal legislation on career education has been increasingly strong over the last several years, and would appear to be becoming stronger through the U.S. Office of Education and the National Institute of Education, Dr. Marland related that State support for career education has also been forthcoming, as evidenced by the fact that 28 States have established full-time career education staffs, 42 States have adopted affirmative policy statements on career education, and numerous specific laws prescribing career education have been passed.

"State and Federal legislation and the support of Congress and State legislatures are good, but one does not reform education by acts of law. . . .Legislation gives encouragement, some financial support, and government authority to stimulate change. But it does not *in education* produce change. That happens only when the classroom door closes and the teacher and students change," Dr. Marland stated.

Education

Pointing out that career education relates to all levels of education and infuses occupational relatedness into the curriculum, Dr. Marland discussed evidence from recent evaluations that demonstrates favorable gains in academic achievement by students in career education.

"I could cite many school systems where the evidence tells us that newly motivated young people learn better when they relate the curriculum to their personal destiny and feel they have some control over it," he said.

"But I say again, the reform of education that brings us here today will not happen unless it starts in the schools. . . .The schools must learn the complex and demanding task of coordinating the enormous new and willing powers of the community—not simply as advisors, taxpayers, and consultants, but as full partners in the enterprise. . . .This means risk-taking by educators with shared authority. But the times call for risk-taking if we are to restore the public trust in our schools and colleges, never so dismal as it is today."

Public

Dr. Marland noted that the general populace and the students themselves, of all ages, expect more from education than it currently offers. Citing statistics from the Gallup Poll regarding the general public's rising expectations for relating work to education, Dr. Marland also commented that students in college are seeking more occupational realism to which colleges must respond.

"It is not a question of *either* liberal arts *or* occupational development; it must be both. That is the essence of career education," he said.

According to the survey of career education mandated by Congress in 1974 and completed in early 1976 by the American Institutes for Research, some 60 percent of the school systems in America are making efforts toward establishing career education; almost 57 percent of the school districts are providing faculty development for some faculty members in career education; 20 percent of the school teachers receive in-service staff development in career education; and yet only three percent of the districts meet all of the survey criteria and are truly conducting a comprehensive career education program.

Recommendations For Continued Reform

"We have truly only begun," Dr. Marland stated. "Let me in closing cite some of the items of unfinished business of career education. . . .I offer these personal judgments as 'imperatives' for the continued reform of education:

1. More systematic teacher education (both in-service and pre-service, at all levels) is needed, especially in infusing traditional academic curriculum content with occupational realism.
2. Engagement of the community, together with business, labor, and industry, is needed in formulating and implementing new policies and procedures.
3. Counselors at high school and college levels, so central to career development, must be freed of their paper shuffling chores to engage deeply in the work of career counseling, and many of them must refresh themselves in business, labor, and industry to equip themselves more fully for the task of helping all young people find their way to make decisions about their futures.
4. We must as a nation greatly improve our methods of manpower needs forecasting to avoid the waste and frustration deriving from over- and

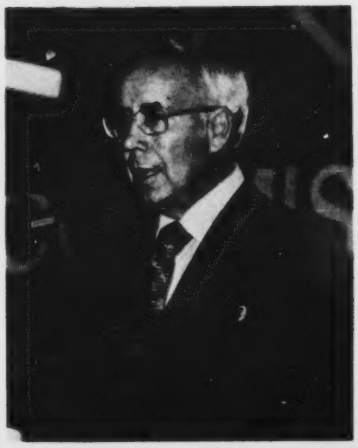
under-supply in some occupations.

5. We must move from the experimental-demonstration mode to the operational-installation mode.
6. We must stop implying that career education will solve all our social problems. . . .We must also make clear again and again that career education is not vocational education.
7. We must resolve the hindrances of obsolete laws and agreements that prevent young people from working; that limit the hours or days of school; that place unreasonable burdens of liability on cooperating businesses offering work sites for the student; that give excessive emphasis to the credentialing of teachers and counselors, foreclosing the usefulness of talented volunteers.
8. We must assess the outcomes of career education . . .and document for others the measurable gains.
9. We must stop talking about worker alienation and. . .make clear to our society that *good* work of whatever calling is to be honored—a task for all involved.
10. We must find the chemistry that will aggregate the enormous power for good that rests among the parts: business, labor, industry, government, the concerned public, the student, and the educators."

In conclusion, Dr. Marland said that six years ago, many people were skeptical that career education was just another passing fad and noted that this conference proved that supposition to be wrong.

"But if, over the next five to ten years, we do our work well, there will no longer be a need to speak of career education. We will speak again of education—for it will have changed," he concluded.

Bell Urges Universities to Connect Studies to World of Work



Dr. Terrel H. Bell, Commissioner of Higher Education for the State of Utah

Following introductory remarks by Mr. E.D. Redding, Vice President, Brown and Root, Inc., Houston, Texas, and Dr. Marlin Brockette, Commissioner of Education for the State of Texas, conferees at the second general session of the conference heard Dr. Terrel Bell discuss career education in today's university.

Formerly U.S. Commissioner of Education and presently Commissioner of Higher Education for the State of Utah, Dr. Bell said that universities must be concerned with the influence that work has on life and should teach students how to apply knowledge to the world of work.

"The ideals of learning must never be too high to be concerned with employment," he said. "The foremost reason most students seek degrees is to prepare for and launch lifetime careers, and the first responsibility of the university must be to prepare students for employment or graduate work leading to employment."

He stressed the point that universities must learn to relate the role of admissions and preparedness to the world of work and said he felt that most universities do not spend enough time on in-depth admissions and counseling processes.

Noting that everyone needs challenging, fulfilling, and self-image building work, Dr. Bell commented that the greatest joy in life is that of accomplishment, and for most people this comes about through work.

"Education is not *only* for work," he said, "and the sole purpose of education is *not* for *minimum* job-entry preparation, but universities must help educate students so that they are aware of employment prospects, as well as being concerned with disciplining the minds of students."

In conclusion, Dr. Bell spoke of his strong conviction that it takes a long period to prepare for the challenges of adult life and adult work. He said that he feels that universities can meet this challenge if they will, but in order to do so there must be an intimate union between practice and theory as well as an intimate relationship between career education decisions made by university students and job prospect realities.

"The universities can give students the best of the ideal and the practical," Dr. Bell said, "and foremost among all other things, the universities must commit themselves to job-related education."

Buzzell Touts Vocational Education as Major Career Education Component

At the second general session of the conference, Dr. Charles Buzzell, Associate Commissioner for Adult, Vocational, Technical, and Manpower Education, Bureau of Occupational and Adult Education, U.S. Office of Education, emphasized the importance of vocational education's role in career education.

Speaking of vocational education as a major component of career education, he addressed the symbiotic nature of the career education/vocational education relationship and stressed the mutual benefits resulting when the two work together.

"Vocational education provides opportunities for skill development in highly visible settings such as laboratories, whereas career education is not as visible since it is infused into many different aspects of our educational system," he said.

"Vocational education assists in updating and upgrading the skills of the adult work force, but this is not the only way in which vocational education can and should support career education."

Mr. Buzzell noted that other ways in which vocational education supports career education include provision of job data and information, firsthand knowledge of concerns of employers and job requirements, and numerous materials and resources to enhance career education efforts community-wide, to enhance learning opportunities, and to provide a broader knowledge base for program development.

"Vocational education cares about rebuilding pride in the world of work," he said, "and it is a challenge to career education to reach out for vocational education, just as it is a challenge to vocational education to take the initiative and make vocational education's vast expertise available in the career education process."

From left, Dr. Kenneth McFarland, Guest Lecturer, General Motors Corporation; Dr. Charles H. Buzzell, Associate Commissioner for Adult, Vocational, Technical, and Manpower Education, Bureau of Occupational and Adult Education, U.S. Office of Education; and Dr. T.S. Hancock, Chairman, Commissioner's National Conference on Career Education.

Participants in second general session of the conference

McFarland Says 'You Can Do Something About It'

Dr. Kenneth McFarland, Guest Lecturer, General Motors Corporation, told participants at the second general session of the conference that Americans need a revolution in values and a reassessment as to what is important in order to change the current American system.

"In terms of career education, this means that people must fit into the American economic system of free enterprise and the political system of individual freedom guaranteed by law, and this rests firmly on a spiritual foundation," he said.

"We cannot assume that Americans understand the system or philosophy of living just because they're Americans. It has been said that spectacular achievements must always be preceded by unspectacular preparation; too many people want to arrive without taking the trip. The kind of people we have living in this country in the future will be determined by the kind of principles they learn and believe in, and we can do something about this," he said.

Noting that he thinks the public will be receptive if educators provide a leadership role in career education, Dr. McFarland deplored the idea that we may be overlooking character as an essential ingredient for a successful career.

"Yes, we must have skills, but skills are like any valuable item; they are valuable as they are, but they become marketable when you take them some place. Career education becomes marketable when it shows people how to deliver skills to jobs. For example, it is not important how to make a successful sale, but it is important how to make a successful sales career," he commented.

Dr. McFarland concluded by urging participants to keep up the good work and to continue assessing whether we are in fact where we feel we should be in career education in this Bicentennial era.

Bommarito Challenges Education to Build on Partnership With Labor

Mr. Peter J. Bommarito, President, United Rubber, Cork, Linoleum, and Plastic Workers of America

The President of the United Rubber, Cork, Linoleum, and Plastic Workers of America, Mr. Peter Bommarito, told conference participants at the third general session that while organized labor has no problem with the concept of career awareness, there are some problems with the ways in which this concept has been interpreted.

"We hope that recent invitations to participate in planning and implementing career education programs are indeed *that*, and not merely an effort to secure our seal of approval. . . .Labor remains the most consistent and effective supporter of public funds for education . . . .It is time to recognize this partnership and build upon it," he said.

Citing some of the history behind the lack of attention paid to labor in the early development of career education, Mr. Bommarito voiced concern over the possibility that career education might become a "vehicle for the return to child labor at substandard wages with industry and schools cooperating to solve youthful unemployment by channeling youngsters away from academics and into work experiences and jobs at an early age."

He stated that labor's position has been and will be that education must do more than provide children with marketable skills at the end of high school.

"Career education can and should be an operating philosophy within our schools which helps *all* children become aware of the world of work in a way which broadens rather than limits their choices. It can and should help young people become aware of the world as it is as well as the way we would like it to be. It can and should be a way of bringing the community into the classroom and the student into the community. It can and should help provide options and flexibility in career choices," he said.

Mr. Bommarito added that career education should not (1) attempt to provide an answer to youth unemployment, (2) turn over public education responsibilities to the private sector, (3) subvert child labor or

minimum wage laws or replace semi-skilled adults with underpaid children, (4) impose job choices too early, thereby providing insufficient general education, (5) assume an orientation toward blue-collar and entry-level training, or (6) provide less education, rather than making the world more real to students.

Advising participants to beware of assuming responsibility for the problems of or solutions to high youth unemployment, Mr. Bommarito encouraged conferees to invite representatives of labor into classrooms and workshops.

"We can add some realism to the discussion of labor's role in building our democracy and we can speak from experience about the world of work our young people will enter. Wages, job security, fringes, advancement, and continuing education are all related to the goals and activities of unions as well as to the needs of our children. . . .We do not view career education as a panacea but rather as an enrichment of a system designed to ever widen the horizons of all Americans, and we will continue to support quality education including career education so long as it is in tune with our vision of an America in which all children can truly become all that they are capable of becoming," he said.

Terrell Discusses Need for Relevant Education

Mr. Richard L. Terrell, Vice Chairman of the Board, General Motors Corporation

At the third general session of the conference, following introductory remarks by The Honorable Dolph Briscoe, Governor of the State of Texas, and others, Mr. Richard L. Terrell, Vice-Chairman of the Board, General Motors Corporation, offered an account of what General Motors is doing about career education.

He emphasized the importance of adding a fourth "R" to the traditional Reading, 'Riting, and 'Rithmetic of education—that of Relevance of education to the world of work.

"Too many of our young people not only have little understanding of the economic system they're inheriting, but are equally ill prepared when it comes to balancing a checkbook, completing a tax form, or filling out a job application," he said.

Suggesting that one promising solution to this problem is career education's emphasis on the teaching of skills as an integral part of the teaching of subjects, Mr. Terrell commented that career education can also often perform a very useful role in helping business attain equal employment objectives.

According to Mr. Terrell, additional benefits to business from the attainment of career education objectives include employees with a fuller measure of skills and talents that contribute to greater achievement; individuals with greater self-awareness and decision-making capabilities; more cost-effective use of tax dollars; an opportunity for management to cooperate with organized labor, leading to better public understanding of their partnership; and better understanding and appreciation of the role of private enterprise in our society.

Stating that in 1975, General Motors alone spent over $100 million in direct aid to education and in employee training and development programs, Mr. Terrell emphasized that General Motors is not unique and that business has long been interested in career education concepts.

He reminded participants, however, that while business and industry are demonstrating a desire to assist in improving education, they cannot force their way into the field and cautioned against the common assumption that where education is concerned, only educators should do the planning.

"If education really wants business involvement in its programs, then educators ought to expect business will want to participate in the planning and evaluation of those programs," Mr. Terrell said.

Commenting that career education only works when business and education collaborate to reach mutual common goals, Mr. Terrell mentioned one program initiated by General Motors involving sponsorship of a series of local business and education workshops. Such workshops bring together school administrators, teachers, and local business people to assist them in identifying and beginning to use existing resources to deliver career education to students.

"A company like General Motors has a compelling interest in education partly because of the talent it supplies us. As an organization, we succeed or fail because of that talent. But we also have a compelling interest in and concern about education because it shapes the future of this country of which we are all a part. We support career education because we believe it can effectively respond to both of those interests," Mr. Terrell concluded.

Aguirre Addresses Career Education on the March

Dr. Luis M. Morton, Jr., President of American Educational Complex, Killeen, Texas, introduces Dr. Edward Aguirre, U.S. Commissioner of Education.

"With the help of schools, parents, working people, and community organizations, career education can find new ways to motivate young people to learn both through work and through school. It can find new ways to open the doors of learning to people of all ages and to make learning so exciting that the learner will not stop in his or her self-development when the immediate demands of a job are met."

These words were spoken by Dr. Edward Aguirre, U.S. Commissioner of Education, at the final general session of the conference, following introductory remarks by Ms. Marian W. LaFollette, Vice-Chairman, National Advisory Council on Career Education.

Dr. Aguirre outlined some of the major Federal developments in support of career education, beginning with the passage of the Education Amendments of 1974, followed by the establishment of the Office of Career Education and funding in fiscal year 1975 of 81 projects across the country focusing on development of career education models. These models include: (1) those within regular kindergarten through high school curricula, (2) those in settings such as a community agency or community college, (3) those with special target populations such as the handicapped or minority groups, (4) training and retraining activities for people conducting career education programs, and (5) projects informing the public of the methods and activities of career education.

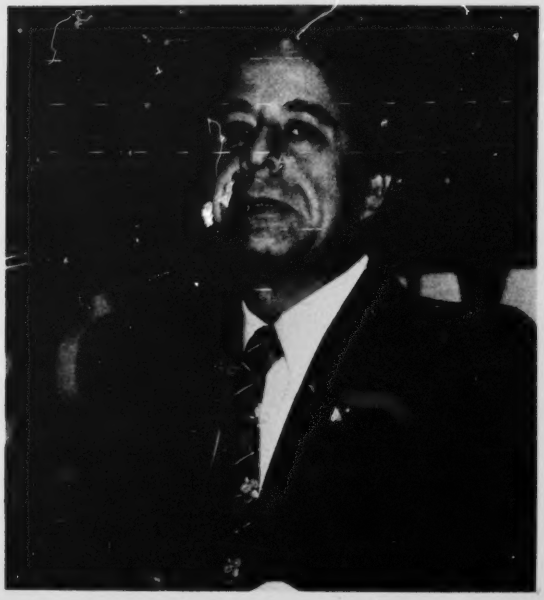
Noting that the budget for fiscal year 1977 allowed funding of 71 projects in these five categories as well as awards of 47 grants to State-level education agencies to develop plans for implementing career education in local school districts, Dr. Aguirre also stated that the Education Amendments of 1976 contain a provision (to become effective in 1978) authorizing $15 million to provide Federal assistance to States for the planning of career education programs. He commented that although this provision is limited to planning, he anticipated Congressional consideration of a major bill for implementing career education soon, and acknowledged that the new Vocational Education Amendments also hold "great promise" for career education.

Citing statistics from the 1975 Adult Performance Level study released by the Office of Education showing that 16 percent of "educated" adult Americans are unable to cope successfully in consumer education, governmental, and legal matters due to a lack of proficiency in reading, writing, and mathematics, Dr. Aguirre said that it has also become increasingly clear that young people are not adequately learning the "social skills" of decision-making, self-reliance, goal orientation, and the ability to change with change.

"Learning is not and never has been restricted to the school setting," he said, "and outside learning is

Ms. Marian LaFollette, Vice-Chairman, National Advisory Council on Career Education

as essential to adequate preparation for life as the school is. This leads us to the unremarkable conclusion that, if education transcends the schools, so does the responsibility for providing it. And it seems to make a good deal of sense to work together—through a partnership—to provide the best possible learning environments. I see career education as the vehicle through which this can be done."



Dr. Edward Aguirre, U.S. Commissioner of Education

Quoting recent AFL-CIO estimates that by 1985 more than half of the American work force will be engaged in skills and jobs which have not yet been invented or developed, and recent U.S. Department of Labor estimates that the average American today will change occupations up to seven times in his or her life, Dr. Aguirre discussed recent legislation for lifelong learning in the 1976 amendments to the Higher Education Act.

"It is encouraging that practically all the education legislation coming out of Congress lately has included a commitment to some aspect of career education. Certainly adaptability skills must also be considered a vital ingredient of lifelong learning," he said.

Emphasizing the point that postsecondary education must be accessible to all who want it, Dr. Aguirre also stressed that freedom of career choice includes eliminating race and sex stereotypes from occupations and the exposure of children to a wide range of career possibilities when they are young and impressionable.

"One of the most beneficial side-effects of career education is the presentation of other role models. . . . With the near demise of the extended family and the emphasis on peer activities during the teen-age years, there is little opportunity for youths to come together with adults other than their parents and teachers—both authority figures. The transition to responsible adulthood is never easy, but it can certainly be helped along if young people are exposed to adult life in a variety of settings throughout their growing-up years," he said.

In conclusion, Dr. Aguirre told participants that the true success of the conference would be determined by their actions after returning to their jobs. He implored participants to assess carefully the needs of the various segments of society they represent in formulating policies and planning for the future.

Section II

Panel Addresses Next Steps for Career Education

Mrs. Thelma T. Daley, Career Education Specialist for the City of Baltimore, Maryland

A panel chaired by Mrs. Thelma Daley, Career Education Specialist for the city of Baltimore and immediate past President of the American Personnel and Guidance Association, Washington, D.C., addressed two major issues: the need for career education in some specific areas, and the next steps to be taken in furthering career education.

Speaking first was Ms. Barbara Ward, a representative of the American Institutes for Research (AIR) and Associate Writer for the National Assessment of Educational Progress (NAEP), Denver, Colorado. Reporting on some of the major findings of that research, she noted that the survey, designed to obtain Census-like data, also obtained career development objectives data. The results showed that 44 percent of 17-year-olds were very interested in professional jobs; however, only two-thirds of that number (27 percent) actually held jobs in this category. Of the 17-year-olds, 35 percent talked to counselors and 70 percent to adults about career objectives. Females fell behind in math and job awareness. Low-income and minority groups performed at levels below the national average. Details are available through AIR.

Mr. Dick Hulsart, Writer for the NAEP, Denver, Colorado, spoke about the next assessment which will emphasize individual student characteristics and help students gain an understanding of their own interests and objectives in addition to skills. He noted the need for information about benefits and employment practices in a person's chosen career.

Relating that another objective of the survey is to measure social and economic change and how it affects young people, he told participants that the study will analyze career modification and change and will also compile sources of extra knowledge and useful career skills.

"Since career education affects a person's whole life, it is vital for personal fulfillment," he said.

He stated that research shows that presently most people who are continuing their education do not find it useful to their jobs. The largest group of students who felt continuing education was valuable were those who had vocational education. This shows the need for more information during the career choosing phases of life, he said.

Dr. JoAnn Steiger, President of the National Advisory Council on Women's Educational Programs, Washington, D.C., and head of her own consulting firm, spoke about the tremendous problem with careers for women, who represent 40 percent of today's workforce.

According to Dr. Steiger, women have a strong tendency to direct themselves to "traditional" female jobs. In 1970, for example, 25 percent of the jobs held by females were in five categories. Men, in contrast, were much more broadly spread through the range of possible occupations.

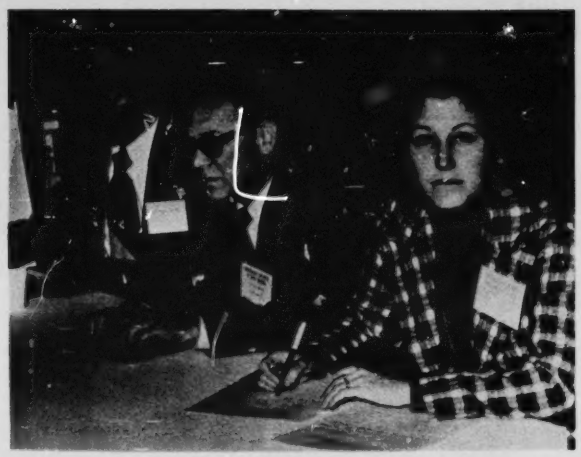
"This is a problem that has to be addressed in the early years so women can orient themselves more toward what is fitting for themselves," she said. "There is a tremendous waste of time and energy devoted to misdirected careers, that could simply be altered if females were more exposed to career opportunities."

Dr. Steiger suggested the use of innovative projects that are not only effective for women, but many other special groups. Stressing that being aware of and eliminating sex biases is crucial, she pointed out that many books depict females, blacks, and other minorities performing traditional roles, and this is only one illustration of bias.

"Job role models can be used in schools and groups. Students should be made aware of sex stereotyping and teachers should be trained to make them more aware of how they present their material. . . .Girls can be offered vocational education in jobs that are traditionally male-oriented," she said.

Calling for sex discrimination to be attacked at the counseling level, she mentioned that early childhood education can start to defuse sex stereotyping roles.

In Dr. Steiger's opinion, there are two major tasks facing women of today: (1) young women should be encouraged to take career preparation seriously, and (2) young women's career horizons should be expanded beyond traditionally sex stereotyped roles.



From left, Dr. Reginald Wilson, Chairman, Career Education Committee, National Urban Coalition, Detroit, Michigan; Mr. George Mihaly, President, Youth Market and Opinion Research, New York, N.Y.; and Dr. JoAnn Steiger, Consultant, National Advisory Council on Women's Educational Programs, Washington, D.C.

Next, Ms. Sharon White Hawk, Curriculum Development Specialist for the Career Education Demonstration Project (CEDP) for American Indian Children, University of South Dakota, stressed the strong need for career education for Indians. Noting that Indians have a great deal of trouble getting worthwhile jobs and that there is a very high rate of unemployment (40 percent) among Indians, she said she feels career education can improve Indian living standards. Quoting statistics to the effect that Indians have a dropout rate of 45-70 percent at the high school level, and only 3 percent of those entering college ever finish, Ms. White Hawk said most Indians are not aware of career opportunities available to them. When asked by Mrs. Daley about the next steps in career education for Indians, Ms. White Hawk replied that there is a distinct need for Indian-oriented, Federally-funded projects.

The next speaker, Mr. Ed Martin, Public Information Officer, Texas Student Association, Houston, Texas, explained some of the problems encountered by college students as they "naively" enter the job market.

"Students are concerned about job satisfaction," he stated. "They want to have jobs that are satisfying, rather than merely to earn a living. Adequate career education can help them retain their idealism."

Mr. Martin discussed the need for improved information dissemination about career opportunities at the post-secondary level. Coupled with inadequate career counseling, this compounds the problem the student faces on graduating from college to enter an unknown world of work.

Mr. George Mihaly, President, Youth Market and Opinion Research, New York, New York, spoke of the need to bring the educational community closer to the world outside the schools to help the outside world learn what goes on in schools. He referenced a survey done for secondary school principals, in which it was found that students want more than just to go to college. Results indicated a strong need for career education as separate from other types of education.

Dr. Reginald Wilson, Chairman, Career Education Committee, of the National Urban Coalition, Detroit, Michigan, stated there is a pressing need for career education to those presently denied access to regular job opportunities.

"Big cities are now the core of job problems. The inner city student is poorly educated and poorly counseled about career opportunities. . . .Bureaucratic school systems are resistant to change. Federal and State governments do fund demonstration projects, often showing superficial change, but the governments do not follow up and real change doesn't occur," he said.

Although he noted that career education does not necessarily lead to jobs, as it sometimes implies, he said it is moving toward meaningful education and it can be made viable.

Some of the recommendations Dr. Wilson made to a House Subcommittee on Career Education at a hearing on House of Representatives Bill No. 11023 were: (1) big cities should be funded separately so support is in proportion to population; (2) local educational agencies should have more work experience programs incorporated into educational programming; and (3) in-service training programs including a knowledge of the real world should be made available for counselors.

He concluded by suggesting that there is a need to deal with the fundamental issues that affect education. He added that additional legislation in the economic area should be passed, in view of the fact that there is a strong correlation between unemployment and suicides, homicides, and other symptoms of unbearable stress.

Other concerns expressed during the session included recognition of the needs of the handicapped and the elderly and the absence of specific special group representation on advisory councils. In addition, panel members unanimously stressed lack of information about career opportunities coupled with inadequate counseling as concerns meriting rigorous remedial action.

Session 101
Career Education: Who Needs It?

Vital Concern for Career Education Expressed by Panel

From left, Ms. Marilyn Rauth, Assistant Director, Educational Research Department, American Federation of Teachers, Washington, D.C.; Dr. Walter Kerr, President, Texas Industry Council, Tyler, Texas; Dr. Norman Gysbers, President-elect, American Personnel and Guidance Association, Columbia, Mississippi; and Dr. Gene Bottoms, President, American Vocational Association, Inc., Atlanta, Georgia

On the opening day of the Commissioner's National Conference on Career Education, Dr. Marlin Brockette, Commissioner of the Texas Education Agency, chaired a session entitled Major Career Education Participants in Elementary and Secondary Education.

Dr. Brockette noted that the presenters were selected and invited from all over the country, and represented those organizations most vitally interested in career education. He explained that they had not been invited to glorify career education, but to encourage honest appraisal, from their unique perspectives.

Ms. Marilyn Rauth, representing the American Federation of Teachers (AFT), reminded the panel that it was their responsibility to put forth ideas about career education in terms of what should and should not be done.

"Career education is a concept," she said, "and an attempt to create a bridge between education and work."

Ms. Rauth then proceeded to establish the theme of the session.

"Career education is an extension of an existing concern," she stated. "Most of us are connected with some aspect of career education."

She asserted that the career education emphasis is used to motivate children to learn basic skills and showed some reservations about the way that the career education concept had been expressed.

"It is said that schools, as they exist, are irrelevant to work," she said, "and I contest that vehemently."

Offering proof of her position, she noted that the number of blue-collar jobs is down while the number of white-collar and service jobs is up. She also stressed that career education must be supplemental to basic education if students are to learn job development skills which will not trap them in obsolescence.

Attacking the misconception that career education will prevent or solve unemployment, she said, "We need programs to increase the number of jobs, not a scapegoat. Career education is not a solution to unemployment."

Another misconception Ms. Rauth exposed is the rationale that children are not motivated to join the world of work, so they should get education through the work experience. Not true, said Ms. Rauth.

". . . . .we must not thrust off our responsibility by pushing the child into the work force. We must address this problem within the educational framework," she said.

She attacked the attempt, in a number of States, to use the career education concept to lower the age at which children may leave school (to 14, in Florida, for example).

"We oppose this," she stated categorically, and she stressed children's needs for lifetime skills.

Speaking to the concern that career education means turning education over to business and industry, she affirmed that education is the domain of the publicly elected school board.

She commented that the AFT sees the career education program as informing the student of possibilities within the world of work. Teachers must learn how to develop career education opportunities, but not to change the basic intent of education from the liberal arts to specific job preparation, she said.

The next speaker was Dr. Walter K. Kerr, member of the National Advisory Council on Vocational Education, and President of the Texas Industrial Council. His concern focused on the future of vocational education, and how vocational education fits within the career education concept.

Noting that, "We haven't been able to bridge the gap between the schoolhouse and the world of work," he spoke about the increasing dropout rate and attributed this to the students' inability to detect any relevance of education to work. Dr. Kerr contended that the gap has not been bridged because nobody is in charge at the other end.

"All those who give jobs—business, industry, labor, government—are responsible," he said.

Dr. Kerr expressed hope that career education is a way to institutionalize the other end of the bridge.

Dr. Norman C. Gysbers, of the American Personnel and Guidance Association (APGA), discussed the efforts the APGA is expending in support of the career education concept.

"We see career education as a way to a broader notion of career development," he began. "An active career guidance role in career education is vital."

Detailing APGA contributions, he noted that APGA supplies guidance personnel to provide leadership in developing individual career development programs; the association identifies, classifies, assimilates, and applies career development materials; it seeks to eliminate the influence of racism and sexism as restrictors of opportunity; and it supplies career counselors to assist people in processing career information. In addition, the APGA has provided a liaison between the educational community and community resource groups; conducts assessment surveys; and organizes and operates job placement programs, including "follow-up" and "follow-through." The association revises curricula, and provides feedback to schools and to the community. Finally, the APGA is involving the home and family in career education.

The intent of APGA is to support career education, and to champion the career education concept at all levels, according to Dr. Gysbers. He noted that APGA's goal is to facilitate total human growth and development.

Dr. James E. Bottoms, President of the American Vocational Association (AVA), and a member of the National Task Force on Career Education, spoke next. He commented that vocational education and the vocational education concept have much to offer career education. Vocational education has emphasized many career education ideas, including forging of linkages between education and work; recognizing the need to identify with work and workers; stressing the importance of vocational guidance; and emphasizing learning by doing. He talked about the blending of vocational education and other ideas to give career education its uniqueness, and claimed a "rightful place for vocational education" in career education.

"Our money was used to nurture and stimulate the career education concept," he said.

He defused a concern of some people that vocational education might be deemphasized by the advent of career education by reminding participants that specific job skills and training are still needed, and that career education has to include specific job preparation skills. Dr. Bottoms said he feels that career education will stimulate changes in vocational education, to increase vocational education's ability to utilize resources and to focus on job skill preparation.

"We provide opportunities for children to visualize themselves in the adult world," he said. He summarized the morning session by saying, "Our youth will evaluate our dreams about tomorrow. They can change the world. They will be more in control of their own destiny. That is what democracy is all about."

Dr. Joseph A. Sathory, Associate Director of the American Association of School Administrators

The Honorable Dr. Marlin L. Brockette, Commissioner of Education, Texas Education Agency, Austin, Texas

(AASA), commented that the AASA supports career education as a means and mechanism to bridge the gap between adolescence and adulthood. He stressed the importance of the inclusion of educational management in significant educational reform.

"People in authority must buy in, if career education is to work," he said.

Laying some groundwork, Dr. Sathory said that educational management needs to be aware of what the components of career education are. It needs to know the program implications of any innovations in curriculum development; it needs to have knowledge of the sources of information, resources, and materials; and it must have programs and plans for development, implementation, and evaluation skills.

"We must establish a climate of inquiry and innovation, to afford people who are trying, the freedom to fail," he said.

Dr. Sathory listed a number of specific career education-type activities in which the AASA has been involved. These included a career education guide for school administrators, meetings to explore the nature of career education, and a joint effort, with the National School Board Association (NSBA), to conduct a series of conferences on career education for school superintendents and administrators throughout the nation. Dr. Sathory closed with an expression of support for the career education concept, in the context of the transition from adolescence to adulthood.

The seventh presenter was Mr. William C. Geer, Executive Director of the Council for Exceptional Children (CEC).

Noting that career education is a core part of the Council's program, he said, "The CEC has a real stake in preparing children for the world of work, and for self-awareness."

In describing the educational system, he said, "We are weaving a tapestry. It is already beautiful. . . . .we are constantly putting in new threads and colors. Career education is part of this tapestry."

Summarizing CEC's involvement with career education and the career education concept, he mentioned that the CEC held a conference on career education for exceptional children and youth, with "far-reaching consequences"; career education is part of CEC annual conventions; CEC policy statements support the career education concept for handicapped and gifted children; and the CEC Board of Governors approved a Division of Career Education in October 1976. He ended his presentation by providing a calendar of career education-oriented events to be sponsored by CEC in the future.

The next speaker was Mr. Will D. Davis, First Vice President of the National School Board Association (NSBA), President of the Texas Education Association, and a trustee of Baylor University. Reminding all present that without the support of local school boards, career education will not happen, he provided a glimpse of the school board perspective.

Commenting that school boards are the gate-keepers of the school system, he averred that innovation occurs in school matters at the discretion of local school boards. They see themselves as the agents, acting in the best interests of the public, and opening or closing the doors to change within the educational structure. The NSBA, representing 90,000 school board members, has been instrumental in career education. NSBA leadership and staff have approved resolutions which come out strongly in support of career education.

Mr. Davis referenced his constituency in citing the Eighth Annual Gallup Poll, which showed that 50 percent of the public endorsed the infusion of career education into the elementary school, and 80 percent supported career education in the secondary school system. He said that public interest will translate into school programs.

"Work must be presented in an attractive manner," he stated. "We must make business and industry part of the educational process."

Reminding participants that school board members have many pressing concerns, Mr. Davis mentioned declining enrollment, funding cutbacks, inflation, and busing as additional priorities. He cautioned that new and better programs are simply beyond the means of some school boards; however, he did assure the audience that school boards would see that career education was not lost amidst the pressure of other school board problems.

The final speaker was Mrs. Walter G. Kimmel, President of the National Congress of Parents and Teachers. She spoke of the PTA's wholehearted support of the career concept as a means of developing satisfaction and confidence, both in oneself and in society. After tracing the PTA's active role in innovation and career education ideas, she expressed the PTA's concern about the inability of children to make wise career selections; about high absenteeism; and about vandalism in schools. She noted that PTA members feel that career education will renew children's interest and motivation.

"Parents and teachers all realize that children should appreciate the dignity of labor," she said. "Youth need all available information about work in order to choose a job. Youth without work experience and job-related information cannot effectively make career choices."

She noted that the PTA has worked with the U.S. Office of Education in designing career education components, and has provided filmstrips and brochures on career education for parents.

Ms. Kimmel strongly emphasized the need for parent education and involvement.

"No program can succeed without the understanding and support of the public," she said. "Parents must have an understanding of career education to support the concept."

In summary, she stated that the PTA has ". . .a critical role to play in promoting career education. We want to help. The PTA contains some of the most creative, flexible, and innovative people in the world. . . . There is a way to get every job done. The PTA can find ways to assist all of you in carrying out the career education program."

Session 102
Major Career Education Participants in Elementary and Secondary Education

Longstreth Describes Tri-State Industrial Career Education Effort

In a session entitled A Tri-State Industry Effort in Career Education, Mr. Thacher Longstreth, President, The Penjerdel Corporation (the Chamber of Commerce in Philadelphia, Pennsylvania), discussed its career education efforts for the three-State area of southeastern Pennsylvania, southern New Jersey, and Delaware.

Mr. Longstreth described a program instituted by the Philadelphia Chamber of Commerce whereby 100 companies donated time and money to working with schools and establishing a relationship between the academic world and corporations. He said that corporate personnel met regularly with teachers to help design course content, and many companies opened their facilities to students for field trips and hands-on experiences.

Mr. Longstreth also stated that forty 15-minute films focusing on discussions of work were made available without cost to the school system in Philadelphia.

This film series was used as the basis for a television program enabling children and their families to be exposed to 40 different careers in areas such as aerospace, insurance, management, and transportation industries.

Mr. Longstreth said that the TV program format consisted of 30-minute segments, each of which began with a presentation of the film and was followed by a discussion between Mr. Longstreth and one or two representatives from the pertinent industry as to career opportunities and requirements in the field.

"The impact has been substantial, while the cost has been nominal," he said. "We ran the television program on the educational TV station three times a week at different times of the day so that families, counselors, and students could all watch it."

Mr. Longstreth noted that the companies participating in the program found they had established a relationship with the schools "above and beyond anything they had ever dreamed of," and he pointed out that any community with a television station could utilize such programs to great advantage.

Mr. Longstreth also mentioned Operation Native Talent, a job fair which has been held for 10 consecutive years and attracts representatives from 50 to 100 participating companies who describe job opportunities to undergraduate and graduate students in local colleges.

Session 103
A Tri-State Industry Effort in Career Education

College Placement Council Stresses Importance of Transition From College to Work

Mr. Frank Hallgren, Director of Career Planning and Placement, University of Nebraska, Lincoln, Nebraska, and President of the College Placement Council (CPC), opened a session on career counseling and placement of college graduates by stating that the CPC is a national organization for those involved in career planning and recruitment. Adding that it is unique in that it serves both colleges (including 2-year community colleges) and people on the employment side of the process, he also said that career planning and counseling should be part of the student's educational process both before attending and after admission to and graduation from college.

Mr. Hallgren went on to say that recent economic uncertainties place in new focus the need for jobs to meet needs and expectations. He pointed out that it had been projected that in the next decade there would be between 900,000 and one million more college graduates than there would be jobs thought to be appropriate for their level of education. He noted that there was a shift to a broader range of jobs, particularly in the service-oriented fields, but that many graduates still feel under- or mis-employed.

The job market for college students is looked at from the standpoints of two broad categories, according to Mr. Hallgren. These are: (1) the specific discipline of the student, and (2) the personal qualities of the student, such as intelligence, motivation, etc. He added that a balance of supply and demand was not likely to be found in jobs as considered from either of these aspects.

He stated that articles are often written which question the value of higher education and call on educators to defend or document the value of a college degree, especially in the liberal arts. He added that in an environment where there is a dearth of jobs to meet expectations coupled with this demand to prove the value of a college degree, the burden on college placement officers is a heavy one. He said that in light of this, a new understanding of college planning and placement had been developing since World War II, and that there was increased recognition of the role of placement and counseling personnel, as well as awareness that faculty members need knowledge and inclination to give aid to these areas.

Mr. Robert F. Herrick, Executive Director of the College Placement Council, Bethlehem, Pennsylvania, offered a picture of CPC functions and uses made of CPC work. He began by stating that a continuum of career counseling should or does exist through high school, college, other post-secondary, and adult education, and that those in counseling and placement play

an important part in this continuum. Adding that high school counselors are under pressure from students and their parents to help them get into colleges, he expressed his hope that these counselors would accept their responsibility to assist young people to think about career concepts at the early stages of their high school experiences, as well as throughout their high school years. He hastened to point out that he was not suggesting that students be frozen into a narrow career pattern early in high school, but was instead stressing the need for young people to be introduced to a broad spectrum of possibilities and helped to realize that career counseling can make a wide area of job and career choices known. He also said that high school career counseling personnel can tap career data available through the College Placement Council.

Mr. Herrick then went on to discuss in further detail some aspects of the College Placement Council. He stated that the council is a consortium of seven regional associations, each with both college and employer members. All of the members provide input; the council is organized into 20 committees which determine needs that should be met by CPC work.

Noting that one major field in which the CPC has traditionally been widely known is publishing, he cited specifically the *College Placement Annual,* which contains lists of jobs offered by employers in the field; the *Journal of College Placement;* and other literature for use by career placement practitioners, students, and employers. He also referred to surveys conducted by the council, especially in the areas of salaries and recruiting, with regard to the amount of recruiting being done and the curricula in which it was being conducted. He added that the council felt that much more basic research was needed to determine what is happening to college graduates.

Other aspects of the council's work in career placement mentioned by Mr. Herrick included computer services, position papers, and cooperation between the council and the government in working to increase employment of women and minorities, and in interpreting legislation for the public.

The next speaker was Dr. Alva C. Cooper of New York City, Staff Consultant to the College Placement Council. She addressed herself to the issue of professional training and development for career planning and placement personnel in order to facilitate career education as it applies to the 4-year college experience.

She said that problems may arise in college when a student thinks he knows what he wants in relation to his future but finds at a later date that his choice was not a final one. She also pointed out that in the liberal arts field, where a broad spectrum of knowledge is covered, students find that post-graduation jobs are not always available. Elaborating on this, she cited a survey which the council had conducted in May 1974 of 1,915 employers, 36 percent of whom reported decreased hiring of liberal arts majors. Many of these employers indicated that they would hire liberal arts graduates if they had had some business-related courses, and about one-fourth of them said that they had programs specifically to train liberal arts graduates. Dr. Cooper also noted that the rate of unemployment among people in the social sciences was high.

In 1975, Dr. Cooper went on to say, the CPC issued a position paper on the hiring of liberal arts students. This position paper stressed the fact that liberal arts studies are valuable, and made recommendations in relation to making this fact known and expanding the choices of careers which might be available to students in these areas. The paper also highlighted the need for counselors to work with students over a wide range of subjects, making them aware of career opportunities and planning at an early stage in their college life, but placing these choices in a realistic context.

Dr. Cooper added that the Council is dedicated to training and education of personnel in order to upgrade their skills and knowledge in career counseling and placement. The council will set standards and apply them in experiential programs, and will work with employers in holding workshops for recruiters across the country. At this time, the CPC has sponsored three institutes for college staffs and recruiters.

Mrs. Jean G. Kessler, Administrative Coordinator for the College Placement Council in Bethlehem, Pennsylvania, was the next speaker, on the topic of research done by the College Placement Council. She outlined results of a survey conducted in relation to the chosen fields of study, career plans, and actual outcomes of a group of students who entered college as freshmen in 1961. Following the initial survey done in that year, follow-ups were conducted in 1965, 1971, and 1975. (The council obtained funding for this research through the College Placement Council Foundation and the National Institute of Education.)

Among the findings disclosed by the survey was the fact that graduates in areas such as business, engineering, and education spoke more favorably than others about the career-related value of their college educations; however, those who majored in the more liberally-oriented fields did not have significantly more favorable attitudes than others regarding the benefits usually ascribed to this type of education (wider general knowledge, ability to think clearly, and leadership ability). In addition, an apparently close relationship between a chosen major and the person's occupation after college does not necessarily mean that the person is making use of his education in his work.

In the 1971 follow-up survey of the 1961 cohort, outcomes were compared with early career plans. The men were dispersed throughout the occupational spectrum, while women in this cohort were clustered in the teaching area. By 1971, barely one-half of this group of graduates were in the occupations which they had planned to enter in 1965. Many had shifted into business careers, and retention in the sciences was higher for men than for women in the group; many of the men in the physical sciences had entered such areas as computers and engineering.

The final segment of the research was the 1975

follow-up which dealt with the cohort's evaluation of the usefulness of their college educations. The two most dissatisfied groups were found to be those who were in certain jobs because they had no choice and those who were in office jobs at a subprofessional level. Also, those who had majored in the liberal arts made up the largest group of dissatisfieds from that perspective. In general, the ratings were more positive than negative in regard to usefulness of their education in providing general knowledge and credentials for jobs. Ratings were low, however, concerning the usefulness of college education in providing career skills and ability to think clearly, and were even lower in terms of its usefulness in providing a choice of life goals. Very few of the graduates felt their college education was sufficient for their jobs, and said they needed something beyond the college education.

Mrs. Kessler ended by saying that the findings of this research suggest a need to broaden education rather than to narrow it. She expressed her hope that these highlights would emphasize the importance of research and of the need for career counseling and placement in order to maximize the utilization of human resources.

The final member of the panel to speak was Mr. Robert C. Becker, Manager of Personnel Relations, the Mellon Bank of Pittsburgh, Pennsylvania, an employer member of the College Placement Council. Outlining the rationale for career planning and placement from the employer's viewpoint, he began by stressing the fact that employers who are involved are strong believers in career planning and placement.

"In talking with 1,000 seniors who say that they are not sure what they want to do as graduates, it becomes apparent that they needed help at a much earlier point in their college careers," he said.

He noted that employers recruit in colleges where the students are given career counseling and placement advice.

"An example of the type of advice valuable to students would be advice encouraging liberal arts majors to include some practical experience in their college lives," he said.

He accented the need for counselors to bridge the gap and help students in the transition from college to the world of work.

Mr. Becker then discussed the responsibility of management in the process of career planning and placement. He referred to the College Placement Council's *Professional Standards of College Recruitment*, which gives an outline of what management must do in recruiting in colleges; the importance of sending well prepared people to recruit; the need for long range planning in relation to recruitment; and the necessity for establishing a year-round program for recruitment.

Some observations on implementing college planning and placement programs on campuses—from the employer's point of view—were then offered by Mr. Becker.

"Most placement programs are improving," he said. "A professional placement director will know his college or university thoroughly, be a good administrator, train staff well, conduct orientation sessions to prepare students for job interviews, and screen candidates in order to match the proper people to the proper job. In addition, an effective placement director will plan ahead and anticipate recruitment needs in order to improve the placement of graduates."

According to Mr. Becker, in today's job market for college graduates, there is a strong demand for engineering and business-oriented people, especially women and minorities, and a general demand for college graduates. He also stated that, in this hiring season, businesses will continue to recruit from colleges which they know. Educators and businessmen, concluded Mr. Becker, will work on the problems of planning and placement together.

Session 104
Career Counseling and Placement of College Graduates

From left, Dr. Delius Wilson, Principal, Boys' and Girls' High School, Brooklyn, N.Y.; Mr. Anthony Sanfilipo, Community Superintendent, District 24, Queens, N.Y.; and Mr. Michael T. Quinn, Coordinator, The Center for Career and Occupational Education, Brooklyn, N.Y., in a session on Career Education Practices: Middle/Junior High School.

School Superintendents Vital to Success of Career Education

The role of the school superintendent is one of utmost importance in the infusion of career education into the total school program. The superintendent's commitment to and involvement in the infusion process can ultimately make a difference in the effectiveness of the program. Changes in education are difficult to make, but they are usually made because those in charge want to make them. Thus, if career education is to be infused throughout a school's curriculum, it is the responsibility of the superintendent to see that the process takes place, according to Dr. Grant Venn, Professor of Education, Georgia State University, Atlanta, Georgia.

Dr. Venn noted that school superintendents are charged with the task of understanding and being able to interpret the concept of career education to their line administrators. The challenge they are faced with is to prepare their students for a future that is continually changing. To meet the challenge, he said, line administrators must understand the career education concept and must agree on what is to be done.

Dr. Venn listed several basic tenets needed for effective career education: (1) career education must be infused into the total curriculum from first grade through the post-secondary level and must involve the entire school staff; (2) career education is for all students; (3) career education may change the purpose and role of the school; (4) career education must involve the entire community; and (5) career education must help students make the transition from school to work.

Dr. Venn urged administrators to take a strong leadership role in the development of career education in their school systems, to commit themselves to the career education concept and make their commitment known, and to become involved in the process of infusing the concept into the school curriculum.

He stated that policy development must be directed by the administrators to change the definition and purpose of the school's role. Development of an administrative plan, and implementation, evaluation, and redesign of the plan must be directed by the administrator, he said.

The key to successful infusion of career education is dependent upon the commitment of administrators and school boards, according to Dr. Venn.

"We have the best educational system in the world, but it needs some changes," he concluded.

Session 105
Career Education and the School Administrator

NACVE Continues Work With Career Education Policy-Makers

Members of the National Advisory Council on Vocational Education (NACVE) held an individual session discussing the future of vocational education.

The speakers included Mr. Frank Cannizzaro, who is also the business agent for the Teamsters Union; Ms. Caroline Hughes, public sector member of NACVE; Mr. John W. Thiele, NACVE Chairman and also Director of Industrial Community Relations for Whirlpool; and Dr. Duane R. Lund, NACVE member.

Speaking about NACVE's functions, Mr. Cannizzaro said that the council advises the Commissioner of Education on the operations of vocational education across the country.

"The council must look at all aspects of vocational education, particularly in regard to program duplication," Mr. Cannizzaro said.

"The NACVE believes that career education is taking a good direction and that it is good for the country," he said. "An important mandate of the council is to work closely with career education," he added.

The NACVE was created by a 1968 Vocational Act and funded by Congress. The 21 members are appointed by the President for three years.

Mr. Thiele said that a new responsibility exists for the council because of the 1968 and 1976 Congressional amendments to the Vocational Act.

"Not only do we advise the Secretary of Health, Education, and Welfare and the Commissioner of Education, but now we advise the President and Congress. The council reports on various items such as budgetary requests, administration preparation, and educational programs," said Mr. Thiele.

He added that the NACVE would be getting a rather free swing to look at nearly all aspects of occupational and vocational education by producing these reports which include recommendations for changes to the Vocational Act and other pertinent laws.

Also, Mr. Thiele said, the council is to consult with the National Commission for Manpower Policy on vocational education and employment training needs of the nation. We will have a member of the NACVE sitting on the National Advisory Commission for Manpower who will report to our council, and in turn a member of their commission will sit in on our council."

The NACVE will conduct independent evaluations of programs carried out under the Vocational Act.

Another responsibility of the NACVE is to provide technical assistance in carrying out their responsibilities to State advisory council leaders.

"The thing that we have going for us on the NACVE more than any other advisory council is the great network of State advisory councils," Mr. Thiele said.

Ms. Hughes told the audience that there is a need to inform the general public of the differences in vocational and career education.

"These two are used synonymously," Ms. Hughes said. "The differences may be known in education circles, but there is still a massive public to inform."

Ms. Hughes pointed out some of the differences in career and vocational education. She said that previously career education funding came out of vocational education funds. Now, with the 1974 Amendments, funding of $15 million for career education is separate from vocational education. She also said that funds for career education are given to individual States for them to determine the best way to promote career education.

Another difference in career and vocational education, Ms. Hughes said, is that future legislation for career education will be considered separately from vocational education.

"However, from the standpoint of a national council on vocational education, we feel a real responsibility as far as continuing development and implementation of career education is concerned," she said.

"We will continue as a vocational educational council in the area of policy and leadership to work with policy-makers in career education," Ms. Hughes added.

Dr. Lund reported next on the Bicentennial Conference of the National Advisory Council in Minneapolis.

"Many people from various disciplines participated and presented papers at this conference. We wanted to get a fresh, objective point of view and make certain that we were not just talking to ourselves," Dr. Lund said. "Therefore, we brought in 21 different viewpoints."

He noted that soon the council will publish reports on these viewpoints and the council's response to the viewpoints. (The State councils will receive the published reports.)

Dr. Lund said that a sincere effort was made to bring people in decision-making positions from all across the country to the bicentennial conference. Members of labor, industry, business, the legislature, and other members of the political scene attended the conference, he added.

According to Dr. Lund, some of these people said that vocational education must be concerned about employment abroad if our nation is to compete successfully in the world economy. He added that conference participants also voiced concern about responding to the changing needs of students, adults, employers, and society in general. Educational delivery systems of the future must be characterized by the word "flexible" if we are going to respond to these changing needs, Dr. Lund said.

"Vocational education will have to do a better job meeting needs of the handicapped and disadvantaged if the program is to be successful. Also vocational educators must, voluntarily or by force of law, provide equally for both sexes and abolish sex role stereotyping," Dr. Lund concluded.

Session 106
The Future of Vocational Education

Washington Model Sets Example for Inner-City Career Education

The Washington, D.C. career education model was designed to provide career education in the inner city and to establish a career foundation program at an elementary level. In a session on Career Education Practices: Middle/Junior High School, Mrs. Ellen F. Datcher, Acting Director of Experience-Based Programs, Office of Career Development, Washington, D.C. Public Schools, explained the workings of the four stages of career education defined by the model.

She noted that first, career awareness begins in pre-kindergarten and spans through sixth grade.

"This stage teaches that there's dignity in all work, that the culture depends upon its workers, that there are many kinds of work and work tools, and that work has rewards," she said.

Second, the career survey stage (the focus of the program) allows students to examine 10 career clusters. According to Mrs. Datcher, seventh graders are exposed to the fields of consumers and homemaking, communications and media, fine arts and humanities, construction and environment, agri-business, natural resources, and marine sciences. Eighth graders survey public service occupations, health occupations, marketing, manufacturing and office occupations, transportation, hospitality, recreation, and personal service occupations.

Mrs. Datcher also briefly mentioned the third and fourth stages, career exploration and career preparation, involving grades nine through twelve.

Presenters noted that starting with two pilot junior high schools, the Washington, D.C. model provided a comprehensive survey of careers in grades seven and eight and exploratory work in cluster areas in grades nine and ten.

"The experience was new and refreshing, proving that kids can be turned on to learning and that the teachers, principals, parents, and students could help to facilitate the infusion of career education in Washington, D.C. schools," Mrs. Datcher commented.

She said the model affected over 16,000 students and has now expanded to eight junior highs, a high school, and 18 elementary schools in the D.C. inner city. The D.C. model gives youngsters "an opportunity to be continually involved" and has established workshops in student government, publications, audio-visual materials, recreation, personal growth, athletics, and community relations. Mrs. Datcher told participants that the program developed a model for parent/community involvement and it encour-

aged teachers to feel individually responsible for students' career development.

"The model illustrates a massive attempt to get youngsters to realize vocations for which they are best suited," she said.

The D.C. model produced 10 manuscripts, one for each career survey cluster.

"It also helped to show students how all career areas are intertwined and that work is not only a source of employment but also entertainment. The Washington model successfully increased student appreciation and broadened overall awareness," she concluded.

Session 109
Career Education Practices: Middle/Junior High School

LaGuardia Community College Establishes Internship Program

LaGuardia Community College in New York was awarded a grant by the Office of Career Education to set up a model career education program.

Dr. Jeffrey Kleinberg, LaGuardia's Career Education Project Director, and Dr. Martin Hamburger, LaGuardia's Dean of Faculty, discussed this program at a session on Career Education Practices in the Community College.

The principal speaker during the session was Dr. Kleinberg. He first described LaGuardia's new role as a career education college.

"We are teaching knowledge, skills, and values, relating classroom work to life outside the campus," he said. "Our primary goal is cooperative education."

Dr. Kleinberg said that each student at LaGuardia must complete three internships during his/her two years at the school. (Each internship lasts three months.) The students are placed in jobs related to the field they are studying, he said.

"Through LaGuardia's Teaching Application and Reinforcement (TAR) program, the students take work-related courses. Then, they go to work and use what they have learned. Finally, they come back to the campus each week while they are employed and discuss, with an advisement team, what they learned on the job," he said.

Dr. Kleinberg elaborated that for example, in the field of psychology, students are taught how to be assertive in supervision; they go observe a supervisor at a business and see firsthand how it works; and the advisement team reinforces what the students learned outside the campus.

Dr. Hamburger said, "In the past our internship program was not working. The students were just working—not learning. Now, we discuss their experiences, learn what they liked or disliked about them, and try to clear up misconceptions."

According to Dr. Kleinberg, the key to the LaGuardia model is counseling.

"We help students figure out where they are going," he said.

Advisement teams consisting of a student service advisor, a cooperative education coordinator, and a faculty member are the core of the counseling process in Dr. Kleinberg's view. Each team works with a group of 25 or 30 incoming freshmen as an extension of freshman orientation.

He related that during weekly freshman advisement hours, the counselors discuss campus services available to the students and how the students' majors relate to career practices.

More than 300 businesses in New York City participate in LaGuardia's internship program.

Dr. Kleinberg commented that the program also teaches students practical application of academic knowledge through simulation activities.

"The faculty use laboratories on the campus for hands-on experience," he said. "For example, in one laboratory they teach students how to use a data processing machine."

Dr. Hamburger said that about half of LaGuardia's students are in business-related majors, while the other half are in health services and liberal arts.

Session 113
Career Education Practices: Community College

ICCE Calls for Career Education Leadership From Colleges

"The first priority in teaching career education is in training teachers," said Dr. Darrell Ward, Director of the Oregon Interinstitutional Consortium for Career Education (ICCE), Salem, Oregon.

In a session on Career Education Practices: College/University Setting, Dr. Ward discussed the consortium, which began in the late 1960's with Ford Foundation "seed" money, grew with additional money from the State of Oregon, and has accelerated its program with funds from the Federal government. In the past few years, the consortium has been able to infuse an understanding of career education's methods and goals into graduates of all of Oregon's education departments.

Dr. Ward broke the ICCE program down into three branches—staff development, program development, and teacher certification. His colleagues, Dr. Allen Lee, Professor of Career Education at Portland State University, Salem, Oregon, and Dr. James Ellingson, Professor of Secondary Education at the Oregon College of Education, Independence, Oregon, then spoke to each point in turn.

Dr. Lee emphasized that at each institution there must be at least one person with responsibility for career education or programs can too readily die. However, he added that coordination is essential to the success of any Statewide program, and that Oregon has been fortunate in this. Both the eight private colleges and seven members of the Oregon State system are working members of the consortium.

"Working from the top down, we provide the programs which can be infused into teacher education and made a part of the curriculum," he said.

Dr. Ellingson emphasized that this process is not a separate course, but a "secondary bloc" program which includes a field school (at Marion, Oregon).

"It's hard to get the attention of college professors and keep it; so in the development of interest, it's been absolutely necessary to give an understanding of career education to liberal arts faculty. What we do in our staff development, then, is to develop cadres for our other schools who can infuse these techniques into the educational process. It's not a threat to traditional education, but rather a necessary addition to it," he said.

Dr. Ward then went on to the subject of teacher certification.

"All teachers trained in Oregon should have curricula infused with the concepts of career education to gain certification. All administrators should know specifically what we mean when we create programs geared to career education," he said.

By the concepts of career education applicable to the average instructor, Dr. Ward used the analogy of male-female courting relationships. The first stage, career emphasis, might work in the elementary grades and be a meeting process. Career exploration, in junior high levels, he went on, amounts to courtship. The third stage, through high school and into early college education, involves engagement. The fourth stage, specialization, is marriage to a career choice.

Funding for ICCE today comes from both State and Federal sources, but staff is employed by the Marion Intermediate Education District.

Session 114
Career Education Practices: College/University Setting

Michigan State Develops Career Education Program to Prepare Teachers

Dr. Casmer Heilman, Associate Professor of Education, Michigan State University, East Lansing, Michigan, speaks on Career Education Practices: Teacher Education Institutions.

The Guidelines for the Michigan State Career Education Council say, "The mission of the College of Education, Michigan State University (MSU) is to develop an innovative and effective program in career education which can be a model for other colleges and universities."

Dr. Cas Heilman, Coordinator for Career Education, College of Education, MSU, and Dr. Richard Gardner, Associate Professor, College of Education, MSU, explained Michigan State's efforts to infuse career education into its program in a session on Career Education Practices: Teacher Education Institutions.

"Career education started at MSU four years ago when seven or eight people became interested in it," Dr. Heilman said.

Dr. Heilman noted that in 1972 Dr. Keith Goldhammer, Dean of the College of Education, appointed an ad hoc committee to study career education which recommended that the college appoint a career education council and coordinator to supervise the implementation of a program to prepare teachers in career education.

According to Dr. Heilman, the committee serves as the college's coordinating body in the development of career education capabilities, and makes recommendations for the Dean's approval. It is composed of nine people appointed for 2-year terms, five from each department and four from the faculty at large.

Dr. Heilman explained that the career education coordinator, who is the executive secretary to the council, assists in planning the agenda, takes minutes, and serves as a consultant to the council and other staff groups.

He also mentioned that the college also participates in the Interinstitutional Consortium on Career Education, composed of the eight major universities in Michigan.

"The biggest issue at the start was defining career education," Dr. Heilman said.

The college eventually adopted the definition that career education is a "pervasive element of the lifelong educational process which emphasizes the interrelationships of occupational roles with civic, family, and avocational roles."

Dr. Heilman commented, "It didn't make sense to give career

education to a department, for it was by its nature interdepartmental."

Instead, the council decided to implement career education in the college by infusion, creating what Dr. Heilman called a career education cognate, or awareness.

Dr. Gardner explained that on the undergraduate level there is only one course in career education, but faculty try to integrate career education into a student's senior year out in the field in student teaching.

"There are more courses on the graduate level," he explained, "but we don't offer a degree in career education. What we do offer is a degree with an emphasis on career education."

Dr. Heilman added that the college does this because career education itself is only an emphasis in a method of teaching.

"People who come to us for degrees," Dr. Heilman said, "are those who want to be coordinators of career education programs or counselors."

He related that to date, the council has supervised the publishing of four works. Three deal with setting up and evaluating career education programs and are designed to be guidelines for teachers interested in career education. The fourth book is an annotated bibliography of all the research the council has done in career education.

Session 115
Career Education Practices: Teacher Education Institutions

New Yorkers Discuss Career Education Programs

Mr. Donald S. Tackley, Career/Industry Education Coordinator, Board of Cooperative Educational Services (BOCES), Endicott, New York, and Mr. Daniel H. Sullivan, Coordinator, Guidance Project, BOCES, Northwest Tech, Ogdensburg, New York, co-presented a program on the counselor educator's role in career education.

Mr. Tackley stated that the role of the counselor educator began "by demand, due to the guidance counselors' inability to make sudden, quick decisions with regard to students and their futures."

He related that in a 5-year follow-up study of high school graduates of New York, it was determined that 50 percent of the students had dropped out of postsecondary institutions.

He told participants that in an effort to help students determine career interests on a broad scale, a program was initiated at the high school level, on a modular system, whereby students were given the General Aptitude Test Battery and also a revision of the Kuder Interest Inventory.

One career-oriented project Mr. Tackley discussed was Project Transition, a program in which students learn where to look for work, how to act while being interviewed, and other practical techniques of the world of business. He said that these techniques are determined not by the faculty and staff of the school, but by employers themselves, through surveys and questionnaires.

Mr. Sullivan spoke next on the functions of the New York Board of Cooperative Educational Services (BOCES). According to Mr. Sullivan, BOCES provides special services to schools, with one of its primary goals being to "help students primarily work in groups."

Mr. Sullivan noted that the career guidance staff developed a Management-By-Objectives program in cooperation with their project evaluator from February 1975 through April 1976. He said that during this 15-month period, some of the objectives implemented were the establishment of a career education resource center, implementation of career education into all school districts of New York, the infusion of career education concepts into the teaching strategies of K-12 teachers, and a focus on enrolling secondary students in post-secondary institutions or finding them employment. It is hoped that most of these objectives will be achieved by 1977, he said.

Session 118
The Counselor Educator in Career Education

Laramore Calls Role of Home and Family Fundamental to Career Choice

"The role of home and family in career education has been neglected even though it is most fundamental to career choice," began Dr. Darryl Laramore of Rockville, Maryland, in a session on Parents in Career Education.

Dr. Laramore, Supervisor of Vocational Guidance for Montgomery County Public Schools, stated that the role of career education and preparation belongs to parents and should begin in the home.

"While schools have taken away many responsibilities of the family, educators should provide skills for parents to assist their children," he contended.

Dr. Laramore said that he gets at least 40 calls each week from worried parents who say their youngsters don't know what to do with their lives. They ask him what tests he can recommend to determine job skills and potential success in a particular field. His reply: "There is no such test that will just stamp a career on a child's forehead."

The major misconception parents and educators have in giving assistance to children is their use of the "old model" of career choice. By this model skills are assessed along with the world of work and a decision is based on that assessment only, Dr. Laramore said.

"In 1976 career choice is a much more complex process. The gathering of employment information is only a small part of making a career choice. Without further consideration of the aspects of life that are affected by a career choice, a 40-year-old finds himself living with an 18-year-old's decision. He is expected to live happily still in a different world with the same job," he noted.

He continued by listing the elements of life that career choice affects directly such as neighborhood, geographical location, leisure time, marriage, and family life. He noted that when a person makes a certain career choice he is also making decisions about these aspects of his life as well.

The neighborhood in which one lives is distinctly affected by his career choice, he stated.

"People don't consider that their career might have no opportunity or market where they want to live," he added.

Dr. Laramore noted that at different incomes and in different careers there are varying types and amounts of leisure activities. He criticized parents who push children into careers of leisure, like golf and music, because then leisure becomes a job and the person ceases to enjoy it.

"A career should be separate, and leisure should provide what a career doesn't," he said.

With marriage, he commented that men sometimes pass up promotions; women sometimes quit jobs to transfer with their husbands. He emphasized that young people should consider the implications of a marriage with two careers, since some careers are incompatible with one another as well as with family life altogether.

"Parents should discuss with their children family values, career values, and the compatibility of careers with family life," Dr. Laramore emphasized.

He continued by noting the tendency of families to find out the "hot fields." Commenting that right now the trend is toward accounting and engineering, he predicted a surplus in both fields in six years and a shortage of elementary school teachers in nine years.

Dr. Laramore also cited the tendency of families to judge certain careers as "appropriate" and "inappropriate."

"Why is there a difference in what's 'appropriate' and 'inappropriate' as far as the sex of a child goes?" he asked. "Parents shouldn't give their kids sex stereotyped roles. They should allow girls to mow the lawn and boys to iron clothes or wash dishes."

Dr. Laramore said he is trying to get parents to realize that the neighborhood is a great source of career information.

"Instead, parents leave it to the schools. The kids don't even know what their own neighbors do for a living," he said.

Dr. Laramore stated further that if parents fail to take their children to work with them, they are excluding them from career awareness.

He also contended that another parental role is a child's development of job-seeking skills.

"The best thing for parents to do is get kids out to work. Parents shouldn't give enough money to kids for their needs. People complain about an 18-year-old being lazy when they haven't let him work until then," he asserted.

He noted that parents can help develop job-seeking skills by role playing an interview with their children.

"Many kids are not lazy; they're just fearful of being rejected in a job interview," he stated.

Parents can also aid their children by showing them how to write resumes and teaching them how to dress appropriately.

"When a person goes to apply for a job, he should look like he already works there. That's just learning how to cope with the establishment," he said.

According to Dr. Laramore, the process of making a career choice is lifelong.

"Many parents and adults are still trying to figure out what to be when they grow up. Some adults in mid-career become dissatisfied, but they don't know how to make a switch," he said.

He maintained that educating children about careers gives them a process to use and reuse.

"They will change; the world will change; but the process stays the same," he said.

Dr. Laramore concluded by revealing that, as a result of working with parents on career education, he is finding more and more parents interested in helping children by relating their job experiences.

Session 119
Parents in Career Education

Stevens Lists Benefits of Career Education for Big Business

"Even though business and industry owe it to society to participate in career education, the matter of business benefiting and profiting from career education still exists," said Mr. Howard Stevens, Staff Administrator for Education Relations Programs of Mountain Bell Telephone Company, Denver, Colorado.

"In the case of Mountain Bell, the managers' attitudes to career education have been positive," he said. "However, it is not easy to convince business people that they can implement career education and still get their job done."

According to Mr. Stevens, it is necessary for the business community to realize that among the benefits career education offers are young people who: accept and are prepared to participate in the free enterprise system; realize what is expected of them by the business community; and have the necessary attitude, motivation, work habits, skills, and a basic economic and

business sense, both as workers and consumers.

Mr. Larry Nash, Consumer Relations Representative for Mountain Bell, Denver, Colorado, pointed out that business people are an important resource to career education and that through their participation, youth are enlightened early as to the relation between school and a career.

He said that there are many directions that can be taken by business people in participating in career education.

"There is a need for career education to be promoted within the business community and certainly a fellow business person would be most effective in this role. Employers can donate personal as well as employee time to career education activities, provide opportunities for students to observe business in action, and provide facilities for work study programs," he said.

Mr. Stevens stated that the necessity for career education is evident in the fact that 800,000 young people are graduating from high school every year without any marketable skills and 850,000 young people are dropping out of high school every year.

"Many students are leaving school as economic illiterates and their irresponsibility is costing business millions of dollars because they have to be trained in the basics they should have received in school. Youth unemployment is four times as high as adult unemployment and job turnover among youth is very high," he said.

Presenters suggested that before a business person becomes involved in career education she/he should (1) discuss present and future career education plans with local school personnel; (2) discuss possible participation on a concrete and specific level; (3) determine limitations of participation; and (4) refuse spur-of-the-moment or unplanned invitations to participate.

Session 127
Large Business and Industry in Career Education

General Electric Sponsors Summer Career Education Program

"Fifty percent of college-age youth will be in college by 1980 although only 20 percent of all occupations today require a degree," stated Mr. Lewis F. Staum, Manager of Employee and Community Relations at General Electric in Bloomington, Indiana.

Mr. Staum said that "too frequently" high school counseling programs have traditionally been geared to assist students who plan for a college education and not to noncollege-bound students.

"Furthermore," he added, "many educators have not had an exposure to the world of work outside of education and may unknowingly provide incorrect or biased information when it comes to discussing career opportunities in business and industry with students."

According to Mr. Staum, General Electric has sponsored a program since 1959 to give educators and counselors firsthand information about industrial careers.

He explained that General Electric offers the program in conjunction with a selected university for six weeks during the summer. Participants can receive college credit, he added.

Currently, the program is conducted at Indiana University and includes classroom work in career counseling and two to three days at the Bloomington General Electric plant.

For those two to three days, the Bloomington plant has developed the following program:

1. Participants (educators and/or counselors) are oriented to the General Electric organization and to the careers that General Electric has for college graduates and noncollege graduates.
2. Participants hold panel discussions with employees who describe their attitudes about working in the plant.
3. Participants actually perform some of the employees' tasks on the production line and in the office. (This is the hands-on experience.)
4. Participants join the employees for social time and enjoy refreshments together.

The key part of the plant program, according to Mr. Staum, is the hands-on experience.

He contended, "As they try to fasten a part to a refrigerator or operate a piece of equipment, most participants find that the task which the employee performs with ease is, in fact, quite difficult."

One of the panelists, Mr. J. Gherardi, Assistant Principal of the Penn Harris Madison School System in Mishawauka, Indiana, commented on the hands-on experience.

Mr. Gherardi said, "I had been telling kids, 'Get your education, otherwise you will be putting the peg in the hole for the rest of your life'. But, I enjoyed doing it. I learned that these people are really happy."

Session 129
Involving the Business Community in Career Education

West Virginia Provides Career Education for Handicapped

According to Dr. Laverne Cook, Project Manager of RCA Education Services, Charleston, West Virginia, programs in career education for handicapped students are developing through a unique system begun in West Virginia in 1973.

The resources of business and industry, represented by RCA Educational Services, were joined by those of education, represented by Kanawha County schools, to plan and provide career education programming for handicapped students.

"Identification of the handicapped," stressed Dr. Cook, "is a primary difficulty in dealing with these 'puzzle children'."

He added that in striving to explain the characteristics of this population to the general public, special education personnel encounter problems of misinformation, misunderstanding, and a lack of awareness concerning the handicapped community and the resources available to it.

According to Dr. Cook, the major focus of the effort in 1973-74 was:

1. To survey existing career, vocational, and special education programs on a national level.
2. To develop an implementation model for career education purposes, emphasizing the handicapped student.
3. To review labor forces and possibilities.
4. To organize local businessmen, laborers, and citizens for discussion and planning of career education for the handicapped.

He stated that during the development of a model program, it was emphasized that people with all disabilities could be admitted. He said that most of the existing programs had always maintained open admissions, but their services were never extended and offered into the community. Features of the implementation model included a survey of parent and student expectations, a survey of local job opportunities, and an analysis of existing career programs.

In 1974-75, the major emphasis moved from development of the internal structure to concentration on external relations through various surveys. For instance, employers were questioned about whether they would hire individuals who were academically or physically limited, and 60 percent replied affirmatively. Dr. Cook noted that hiring of the individual was stressed, not hiring of the handicapped in general.

This past year has seen the development of career awareness, implementation of comprehensive pilot programs, recommendations for future programs, and development of career preparation competency lists.

Dr. Cook explained that competency lists were perceived as the heart of the development efforts, since their goal was to present the program, reflect the mastery levels to be attained, and characterize successful performance.

Dr. Cook summarized the role of planning and design as resting with the schools.

"The role of RCA Educational Services is to carry out that plan," he said.

Session 130
Career Education: Practices in Special Education

Utah Project Designs Seminar on Changing Role of Women

A common question adults ask young children is: What do you want to be when you grow up? The response from little boys is usually something like a fireman, an astronaut, or a doctor. Little girls, however, often respond with, "I want to get married." A young woman very often goes from being someone's daughter to being someone's wife without ever knowing who she really is, Ms. Beth Gurrister said.

Ms. Gurrister is the Chairperson for the Governor's Commission on the Status of Women in Utah. She told participants that the education committee designed a seminar called Expectations, aimed at helping high school girls face and prepare for the changing role of women in today's society. The seminar was held during one school day and was presented at the Box Elder High School in Brigham City, Utah.

According to Ms. Gurrister, four basic concepts were developed in the seminar. The first was awareness of self as a unique person. The second was the significance of being a female. This concept was developed by exploring a woman's relationships and responsibilities in terms of family and community. The third was recognition of the multiple roles a woman will assume or have imposed on her. The fourth was the awareness of the increasingly complex, technological world of her future.

Dr. Phyllis Snow, Dean of the College of Family Life at Utah State University, outlined some components of the seminar presented at Box Elder High.

The seminar began with a reception, she said. Mrs. Calvin L. Rampton, wife of the Governor of Utah, spoke to the girls about her work and role as a wife. She compared her life to that of her mother and grandmother to show how a revolution has taken place in the life patterns of women.

The next phase was a three-way slide presentation, emphasizing that young women should learn about and expose themselves to many different aspects of life before jumping into marriage. Popular background music and "young kids' jar-

gon" were used to get across the message.

Following the slide presentation was a panel discussion. The panel consisted of six women from the community who represented a variety of role models. Each woman gave an account of her own lifestyle, Dr. Snow said.

"We want the girls to look realistically at the prospects of life. We want them to project beyond high school and prepare for it," Ms. Gurrister said.

Ms. Gurrister noted that the girls in the seminar were divided into groups of 10. Each girl was given a hypothetical situation of a lifestyle she may some day be living and was asked to explain how she would handle it. The other participants offered suggestions and discussed alternate solutions. The purpose of this phase was not to judge the girls' answers, she explained, but to make them become interested in life planning.

Next, a one-act play was presented epitomizing the dilemma of women.

The seminar closed with small-group discussions led by participants from the panel discussion.

Dr. Snow said the girls who participated in the seminar expressed gratitude for the chance to use their imaginations. They said they were left with a feeling of being glad they were women.

"We are not trying to channel anyone into a specific area," Ms. Gurrister said. "We are trying to let the girls find out who they are and what interests they would like to pursue."

Session 131
Career Education: Women in the World of Work

Kansas Students Benefit by Participating in Local Government

"Have you ever heard of high school students serving on the school board, or the city or county boards, not just for a 'student government day' but for a whole year?" Mr. John T. Forbes, Assistant Principal of Lawrence High School, Lawrence, Kansas, asked his audience.

Nineteen Lawrence high school students have the opportunity to do just that each year by participating in the Students in Local Government program.

The program is sponsored, underwritten, and financed by the Lawrence Kiwanis Club in a cooperative agreement with Lawrence High School, Mr. Forbes said.

"The aim of the program is to give students firsthand insight into the operation of local government and the community at large," Mr. Forbes explained. "The concepts of career education are exemplified because students meet with doctors, lawyers, tradesmen, business people, whatever people serve on the boards in the community. These people want the best for their community or they wouldn't be giving their volunteer time for these boards."

According to Mr. Forbes, students involved in the 7-year-old program serve as ex-officio members of 17 local boards. They may ask questions, give opinions, and vote, although their votes do not count. Students are expected to conduct themselves as board members and are trusted with confidential information.

Participants are selected to serve during the final semester of their junior year through the first semester of their senior year, Mr. Forbes explained.

He said that interested students complete application forms, obtain signatures of fellow students, and write a personal recommendation as well as obtaining three written recommendations from teachers or employers.

A committee composed of the building principal, sponsor of the Students in Government program, junior class president and vice president, and Student Council president select the final participants.

"A program like this can work with any service organization in the community," Mr. Forbes said.

He recommended that to get started, club representatives should discuss the plan with the mayor, city manager, and commissioners.

"Try to get the cooperation of all the boards in your community, to be effective," Mr. Forbes suggested.

He also recommended explaining to the Superintendent of Schools the benefits—the program gives students firsthand involvement in government; meeting and observing local leaders is career education in practice; the program helps improve students' self-images; and it costs the school district almost nothing.

He noted that the service club provides recognition for the students with an annual banquet honoring them and the members of the participating boards and commissions.

Mr. Forbes said the program has been very successful during its seven years of operation and former student participants are used to recruit new students each year.

According to Mr. Forbes, some of the factors that made Students in Local Government work in his community include the support of a service group to give prestige and recognition to students, commitment of the local government and school system, and publicity from the school and local newspapers and radio stations.

Session 134
Kiwanis and Career Education

GROW Program Combines Eight Elements of Career Education

Gaining the Realities of Work (GROW) is a career education program in Florida schools which, according to Dr. Maxine F. Carr, Assistant Professor of Counseling at Florida Technological University, combines the eight elements of career education.

Dr. Carr described the basic operation of GROW and noted both problems and benefits from organizing the program.

"We gave teachers a beginning," she said. "A good example is physics; two things taught in physics are inertia and force. In studying these phenomena, one class set up a bicycle repair shop in the classroom."

One early problem noted by the program's organizers concerned teacher responsibility. Several teachers felt that the GROW program would add to their workload. Dr. Carr and others stressed the importance of flexibility for teachers rather than rigid structuring.

"What the program does not do is tell when to breathe or what questions to ask. Instead, it gives a smorgasbord of ideas," she said.

The GROW program uses activity cards which include directions for a project designed to stimulate one or more of the career education elements. The activity cards are grouped by grade levels: K-2, 3-6, 7-9, and 10-12.

One project activity, entitled awareness exercises for grades 7-9, involves as its performance objective identifying at least three personal attitudes and listing people with whom the student is most comfortable in discussing particular likes and dislikes.

According to the activity card, the exercise is designed to stimulate career awareness, decision-making, employability skills, and self-awareness.

The activity can be included as a resource in social studies, English, and health classes to build self-awareness.

An example of a 10-12 card is entitled, "How would YOU handle it?" Here, the student is given a situation from history and asked to offer his solutions.

According to Dr. Carr, the program is available to all schools in Florida.

Session 135
Curriculum-Infusion Approaches to Career Education (Grades K-12)

Vermont Schools Make Heavy Use of Resource People in the Classroom

According to Dr. T.S. Hancock, Chairman of the Commissioner's Conference on Career Education, "Too many students leave high school ill-equipped to get a job, either in specific skills or attitudes."

Dr. Hancock believes that the concept of career education addresses these problems by incorporating community input into the classroom and showing young people the relevance of what they study to how they earn a living as adults.

In a session on Resource People in the Classroom, Vermont educators said that they agreed with Dr. Hancock and added that they believe that career education must be incorporated into all levels of curriculum for a successful program to exist.

"The main objective at the elementary level is to bring resource people into the classroom to show the students where and how the things they learn in school are used," said Mr. Kerry Keenan.

Mr. Keenan, Principal of Portland Street Elementary School, St. Johnsbury, Vermont, told participants that he tries to make learning as real as possible.

"If a class is learning about steam or heating systems, why not talk to and visit the custodians at the school?" he said.

He added that parents and older students are a source of valuable information for the elementary student.

In addition to resource people, Mr. Keenan noted that Portland Street Elementary uses an occupational project in which a student selects a job and then finds out the requirements and responsibilities involved. After studying the occupation, the student visits or "shadows" a person in the position he selected and brings back tapes and slides to share the experience with the rest of the class.

Representatives from the Burlington, Vermont schools said they are excited about the enthusiasm of the community and students in career education projects. Noting that a long list of resource people is available to the students, they said that one math project has 36 people from different areas of work available. Each visits the classroom on a specific day and relates his/her job to the math lesson for that day or week.

An example of infusion of career education into the regular curriculum is the Bag Lunch Program. In order to have a brown bag lunch with a person in whose occupation they are interested, students incorporate many skills such as phone directory usage, phone contact, writing and note-taking, and correct grammar.

Session 136
Resource People in the Classroom

University of Maryland Tries New Career Decision-Making Program

The semester-long career decision-making program at the University of Maryland, College Park, Maryland, is devoted to "increasing the complexity of student thoughts on career development," Ms. Judith Trichton, Assistant Director of the Career Development Center at the school, said.

A structured course designed for freshmen and sophomores which requires student thought on the topic has accordingly been instituted. Ms. Trichton noted that the meaning of career decision-making was discussed by a faculty-student-administrative committee which studied issues such as what is development, what do we need to know about our population, what can we learn about University of Maryland students, and how can we educate them?

Ms. Trichton stated that, with the input of students, these questions were explored and several tentative conclusions were reached. Development was seen as "the qualitative changes which contribute to an individual's understanding of his/her world," she said.

According to Ms. Trichton, the course hoped to increase the students' awareness of career development's importance; but to do this effectively, the appropriate intervention model had to be selected, designed, and modified.

Accordingly, Ms. Trichton and Ms. Janet Cornfeld, Instructor, Counseling and Personnel Services, in the Department of Personnel Development, chose the Knefelkamp Slepitza (KS) model of developmental instruction, which emphasizes work done at a level most appropriate to the target group. They hypothesized that a developmental course would increase "complex cognitive developmental skills." Ms. Trichton said they found that the best model for the College Park campus was a course organized with three classes using the new KS method of developmental instruction, two classes using the classroom intervention method, and one mixed system.

Presenters related that the new KS model aims to carry a student from simplistic viewpoints to those encompassing many variables. Four stages are involved in the process, including dualism, multiplicity, relativism, and commitment within relativism.

Using a slide show to guide the audience through these stages, Ms. Cornfeld explained that dualism is the tendency to think that there's "just one right career"; multiplicity is knowledge of choice but a pervasive fear of error; and relativism and commitment within relativism imply self-knowledge, decision-making ability, and the ability to handle attacks of multiplicity.

They used the Loretta developmental instructional method to teach multicomplex concepts. The method was especially helpful in encouraging students to relate ideas from class to other areas of their lives, Ms. Cornfeld said.

Presenters commented that students still troubled by recalcitrant dualism were aided through role playing and discussion about how students felt, and as the semester went along, this process became intuitive. Log books on student reactions to the course were continually monitored, and after every class period students wrote a paragraph detailing their positive and negative responses.

According to Ms. Cornfeld, all of these methods were needed to break "the most persistent and unsettling student response: rigidity of thought." The instructors asked many questions and wrote a lot to the students to encourage their consideration of alternate thought modes and deepened complexity of their career development plans.

After the semester ended and the data had been collated, student cognitive development was found to have increased in the new KS classes (+.69), while a slow rise in the old style classroom intervention classes (+.25) was observed.

Session 142
Career Decision-Making Programs

Ms. Phyllis E. Smith, Career Education Consultant, Wayne County Intermediate School District, Wayne, Michigan, shows a film in a session on The Girl Scouts in Career Education.

STEP Project Provides In-Service Training to Counselors at Business Sites

Dr. Dale E. Brooks, Director of the Central Kansas Area Vocational and Technical School, Newton, Kansas, discussed a program that had infused career education into the secondary and post-secondary levels by in-service training involving school counselors and area employers.

The program, Dr. Brooks said, is called the School To Employment Process (STEP) and is organized to increase students' awareness of themselves and the world of work.

This is initially done by familiarizing and educating the school counselors through an in-service training program and the Vocational Exploration Group (VEG), which are part of the STEP scheme.

"The counselor participation in the program was voluntary," Dr. Brooks explained. "Counselors applied for the program and signed an education contract agreeing to make a set number of visits to area employers. When the counselor visited a site, he/she had each employer fill out a Linkage Interview Form that gave a description of the firm, its employment practices, job classifications, and education and skill requirements. The counselors then reported on the information gathered and their various experiences at the businesses in the VEG."

Dr. Brooks said that the small-group setting provided a congenial framework where counselors could share their experiences and exchange information with each other.

The STEP project teamed with Wichita State University to offer three hours of graduate credit to the program participants. Dr. Brooke B. Collison, Associate Professor in Counselor Education at Wichita State, trained project counselors in the in-service program and the vocational exploration groups.

Dr. Collison explained that the STEP project worked from within the group of school counselors rather than giving any type of a mandate to the schools to change their system of counseling students. He said he felt this was effective because it encouraged group members to take responsibility for the program.

Dr. Collison also elaborated on the employer linkage form and noted that the STEP interview involved not only a description of the firm, but the various job classifications and titles, and employment preferences of the business. He added that school counselors and area employers discussed and planned specific field trips for the students to give them exposure to various "real world" occupations.

One of the largest corporations located in the area involving the 18 school districts is the Hesston Corporation, Hesston, Kansas, of which Mr. Nelson Gallie, General Manager, spoke.

Emphasizing that industry needs to work with educators, Mr. Gallie mentioned the open house for vocational education counselors that Hesston had hosted and talked about the counselors' workshops which included tours, short presentations, and discussions with counselors of the different skills needed for various existing jobs.

Turning to ways in which school counselors and administration could work with industry in implementing career education, he suggested that teachers and counselors invite people in industry to speak to their classes. He recommended contacting the personnel manager in each company to be visited so that when a field trip was planned, students could view one specific part of a business rather than receive a brief overview of the whole company.

Mr. Gallie also suggested that various students' parents visit the class and explain their particular occupations to the students.

The Program Supervisor for STEP and Vocational Exploration Group, Ms. Mary W. Kosier, discussed the support services for the program. She said that frequent contact was made with the project counselors to obtain feedback and to keep them involved. She alluded to the additional follow-up in-service sessions that were scheduled throughout the year for sharing and reinforcement of career education experiences, and noted that yearly meetings with area employers and school superintendents were held.

She concluded by suggesting that more programs like the Central Kansas Career Development Project be developed. She stressed communication as the key factor in a program such as this, and said that counselor participation should be voluntary. She explained that a project coordinator is needed for each area to keep involvement high, and emphasized the importance of keeping groups to a small, workable size.

Session 143
Job Acquisition and Retention Skills Programs

Aslanian Lists Criteria to Look for in a Career Education Evaluator

Ms. Carol B. Aslanian, Assistant Director for Career Education, Policy Studies in Education, New York, New York, outlined criteria for career education administrators seeking external evaluators for their programs.

In a session on Evaluating Process and Product in Career Education, she noted that since 1971 Policy Studies has been involved in more than 75 different career education efforts for a variety of government agencies and private councils, foundations, and universities.

In describing attributes of a good evaluator, Ms. Aslanian used the case-study approach and based her remarks on her own organization's findings.

"In assessing a career education evaluator," she said, "the client should expect the evaluator to have worked for a wide range of clients, from the national to the local level. Areas covered by the evaluator's service should include adult counseling, career education, computer services, curriculum, special education, and media services. The evaluator should be able to work in many parts of the country and in many different States. Services offered should include attitude studies, curriculum development, and most important, evaluation." She noted that an evaluator, finally, should start with a program on day one, and help the client make decisions as he goes along.

She explained that in planning an evaluation, Policy Studies in Education first reviews objectives or goals. For each goal, an evaluation design is established. The evaluator meets with, and talks to, the client to accomplish this first step.

Ms. Aslanian said that the first question to ask in establishing the evaluation design is who should be included. Possible groups include local residents, students, employees, parents, and teachers.

Commenting that there should always be a control group and an experimental group, she added that usually a pre- and a post-test are given.

According to Ms. Aslanian, the second consideration in evaluation design is deciding, with the client, what is to be evaluated.

Information gathering follows, with interviews, observations, tests, questionnaires, surveys, and workshops.

In discussing the selection of tools, Ms. Aslanian stated that a pre-test instrument generally tells what must be learned by the end of the year and suggested that other tools might include a student attitude sheet and a teacher reaction instrument. She added that pre-tests and post-tests should be scheduled as far apart as possible, so that there is a chance for change to take place.

Ms. Aslanian said that a good evaluator makes reports by telephone, in writing, and at meetings.

"The results of a competent and thorough evaluation can influence boards of education, help with in-service teacher training, and aid in teacher training programs," she said.

She added that the evaluator's reports can be used to recommend new curriculum materials and that evaluation can help students develop new career experience.

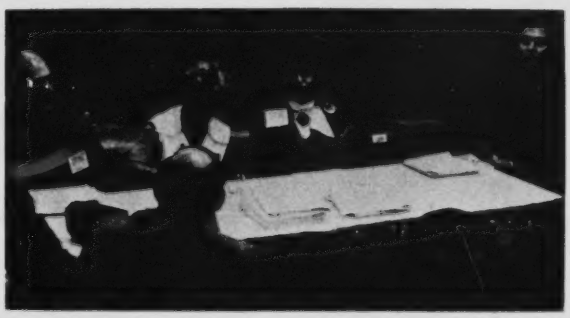
"Without evaluation," Ms. Aslanian said, "nothing much would happen in a project."

Ms. Aslanian cited the following project-related findings that her organization has learned from evaluation projects:

1. Training project staff is essential.
2. Administrative support and endorsement are needed on all levels.
3. Staff training is essential, for a minimum of ten hours.
4. There is a need to specify goals and objectives, particularly student outcomes.
5. Teaching staff must be familiar with student outcomes.
6. Instructional materials are needed by teachers.
7. Staff is needed to search for, review, and select materials.
8. Community involvement is necessary.
9. State and local money helps, if Federal funds taper off.

Summing up, Ms. Aslanian said that a good evaluator works day-to-day with clients, is imaginative and creative, and shows what both are trying to achieve.

Session 144
Evaluating Process and Product in Career Education



From left, Mr. Robert R. Stewart, President, Arizona Business-Industry-Education Council, Phoenix, Arizona; Ms. Maxine E. Johnson, Community Resource Coordinator, Mesa Public Schools, Mesa, Arizona; Ms. Janet Beauchamp, Consultant, Arizona Education Association, Phoenix, Arizona; and Mr. John Komar, Career Education Specialist, Arizona Department of Education, Phoenix, Arizona, in a session on Community Career Education Action Committees.

Youth Work With Management in Executive Internships

Almost 3,000 talented high school juniors and seniors in 20 States are learning leadership skills from community experts by serving as executive high school interns to businessmen, government officials, television producers, museum curators, newspaper editors, judges, and directors of civic programs.

For a semester, on sabbatical from class, students receive full academic credit as they follow and assist local civic and business leaders with correspondence and research, attend meetings with their sponsor, witness decision-makers in action, and follow up on professional-level assignments. They work with the executives four days a week; the fifth is set aside for evaluative seminars for all local interns.

The interns receive no salary, as they do not enter the business as fully-trained productive employees. Instead, the program coordinators claim that the students gain a realistic picture of the role of an executive in an organization, and solidify their career goals. Communications and analytic skills are also strengthened by practical use, as is sensitivity to interpersonal relations.

The executive internship program seeks to clarify the importance of education for its participants.

Mr. Michael Angel, a senior at Sam Houston High School, Houston, Texas, and an ex-intern for John Hancock Insurance Company, enthused: "I could read every book about how important education is and not learn anything. The only way I'm going to learn anything right is to experience it. Because of my experiences, I'll be able to comprehend my studies better in the future."

Successful students may subsequently be hired by their sponsors or receive recommendations for college or employment.

Interns are selected on the basis of maturity, resourcefulness, initiative, perseverance, self-confidence, dependability, and flexibility. Emphasis is placed on choosing juniors or first-semester seniors, since they can return to the school and relay their knowledge and discoveries to faculty, parents, and student groups. Special aptitudes in science, mathematics, journalism, or art may also be required for certain internships.

Few of the students have previous experience in the field of their internships. Ms. Moritza Day, a business administration student at the University of Houston, interned with the Food and Drug Administration in Houston. Previously, she had only worked as a supermarket checker.

"If I hadn't had this program," she said, "it would have been a long time before I ever got into the FDA, let alone worked with an executive."

Each participating community solicits sponsors and then matches up students and sponsors according to ability, ambition, and temperament.

Ms. Joyce L. Moss, Coordinator for the program for the Houston Independent School District, said, "The basic element is the one-to-one relationship between student and sponsor. The young people don't go in as part of an office. They are assistants to people. All you need to do is talk with the sponsors and find that young people are very in tune with what the free enterprise system is all about."

Mr. Lawrence Marshall, Associate Superintendent of the Alternative Educational Program for the Houston Independent School District, said he is very pleased with community reaction.

"The business community is overwhelmingly in favor of the program," he reported. "In Houston, we're close to having the Chamber of Commerce as an advisory committee. We've got sponsors ready to go for the second quarter in businesses we've never had before, like investment banking and international law firms."

The internships began in 1971 in New York City, when Dr. Charlene Hirsch, then head of the city's Human Resources Administration's Office of Educational Development, placed 25 students in positions with the city's public and private workers. Dr. Hirsch now serves as National Director of Executive High School Internships of America (EHSIA), which oversees most of the nation's executive internship projects.

For a membership fee of $2,000, EHSIA conducts a week-long National Coordinators' Training Academy, and provides evaluation materials and advice to the member school systems.

Additional costs for the programs average $645 per student. An average of 30 to 40 students serve internships in each school district.

The national office has received support from major foundations, including Ford and Rockefeller, the National Institute of Education, participating school systems, and corporations such as the Exxon Corporation.

Session 145
The Executive High School Internship Program

Alabama Educators Give Views on Societal Problems and Career Education

A lack of pride in today's world of work is largely caused by the workers' lack of self-fulfillment and their loss of self-respect, according to Mr. J.B. Wier, Supervisor of Instruction in Alabama's Pickens County Schools.

"Career education promises to teach the dignity of all work," Mr. Wier said during a panel discussion on Societal Problems and the Need for Career Education.

"In school, the students have low aspirations and almost no motivation because of the lack of career education," he said. "Career education helps expose students to the world of work. It gives the student something to plan for, something to look forward to."

Career education is necessary to give school children an insight into the types of jobs available, according to Ms. Ann Kelley, panelist and Elementary School Principal in Troy, Alabama.

"Children like the glamorous jobs that they see on television like those of policemen, firemen, or astronauts," Ms. Kelley said. "They view other jobs as just something to receive money for, to buy the necessities of life."

Ms. Kelley said that career education helps the children get an idea of themselves and makes them realize they are different from other children. After they find what interests them and what they are good in, then they can begin to plan their own careers, she said.

"Don't just tell children, 'You should know this,' and not tell them why. You have to tell them not only why but what, where, and when. Children must have a purpose, a career, in mind," she said.

Another major societal problem is the use of leisure time, said Dr. Robert Anderson, panelist and Counselor/Educator with the University of Alabama at Birmingham.

The panelists agreed the amount of leisure time is growing and there is some inappropriate use of it.

"Vandalism and stealing are just some of the unproductive uses of leisure time," Mr. Wier said.

Dr. W.C. Hannah, Assistant Superintendent of Alabama's Lauderdale County Schools, said, "We tell children to plan their work, but how many times do we tell them to plan their leisure time? This should be a goal of career education."

Panelists spoke of inadequate involvement of parents in education as another societal problem. Educators have been afraid to involve them in the educational process, according to Mr. Wier.

"In Pickens County, Alabama, parents work as supervisors of their school children. Parents tell the teachers what grades they feel their children should make on the basis of the initiative and work done by the children at home," Mr. Wier said.

The final problem discussed was the need to make legislators aware of career education. Alabama was used as an example because 90 percent of local school money comes from the State government.

"Since educators are becoming involved in the political process, I think we should involve legislators in the educational process," Dr. Hannah said. "It is a way to further career education."

Session 148
Societal Problems and the Need for Career Education

Virginia College Develops Program for Nontraditional Adult Students

Northern Virginia Community College in Annandale, Virginia is offering a new approach to adult career education in which nontraditional students can attain their goals in career alternatives.

Project CENTS (Career Education for Non-Traditional Students), funded by the United States Office of Education, was discussed by its Director, Dr. Stephen Forrer. He noted that the program helps adults establish major objectives for choosing a career and attaining their goals.

Dr. Forrer said that Northern Virginia Community College, the participating institution for Project CENTS, offers a 14-week course or a 20-week self-developed course on a mail-order basis.

According to Dr. Forrer, the course is divided into two parts: the anticipation period and the implementation period for adaptation.

The anticipation period begins with awareness of self, including the personal interests and talents of each student. The materials can be used in the classroom setting, in individual or group counseling, or on an individual basis, Dr. Forrer said.

The student then progresses toward awareness of work, which involves career choices available in his/her community.

At this point, the important choice of a career is made. After the student decides on a job, the preparation process (including education and training) begins and the change process proceeds, including job-finding and job-keeping.

"This involves a process to have people develop a strategy right to their retirement," Dr. Forrer said.

He noted that each job choice involves the explanation of monetary and nonmonetary rewards of working, including fringe benefits, retirement funds, and insurance expenses.

"We try to control the environment to increase the probability that what you strive for can happen," Dr. Forrer said, "and these goals are attainable in two years, which is nice."

He noted that during one year of project operation, 21,439 adults in Virginia were provided with assistance in skill development and career education.

Session 152
Post-Secondary Counselors in Career Education

WOWEE Blends Career and Economic Education

Dr. Lewis M. Abernathy, Director of the National Center for World-of-Work Economic Education (WOWEE) at North Texas State University in Denton, Texas, explained a complete multi-media instructional package for WOWEE.

Dr. Abernathy, co-developer with Mr. William A. Luker of the I(t) Work(s) package, described the system. The package consists of synchronized audio-visual slides and tapes, topic monographs, programmed materials, and classroom implementation plans which are built around certain elements, Dr. Abernathy said.

"The goal of our instructional package is to bridge the gap between school and the world of work," Dr. Abernathy said. "To do this, students who graduate from high school will have a functional knowledge of the American market economy and a realistic picture of job opportunities and skill requirements of those jobs in the world of work through such a system as I(t) Work(s)," he said.

Another objective of this system is to help students acquire a positive attitude toward work in order to become productive citizens, consumers, and workers, Dr. Abernathy said.

The I(t) Work(s) system consists of audio-visual components such as slides, tape cassettes, transparencies, and scripts. They were designed to appeal to students through the use of colorful graphics, student actors, worker job discussion, and the two main characters, Ms. Market and Super "E"(ntrepreneur), who explain the basic organization of the free enterprise market system.

The multi-media system also consists of topic monographs (a series of student-oriented topic booklets that deal with basic economic and world of work concepts). These booklets are: *The Nutshell: An Introduction to Economics, Instability: The Ups and Downs of a Market Economy, Change: Social and Economic Dimensions,* and *Marketability: Life and Career Planning.*

Also available in the multi-media system are programmed materials that are "valuable in self-paced, individualized instruction programs and in meeting the needs of the student with special learning problems," according to Dr. Abernathy. He said that a teacher guide and lesson plans with a 10-hour teacher training package called the Staff Development Workshop are available.

Dr. Michael MacDowell, of Northern Illinois University in DeKalb, and Director of the Illinois Council on Economic Education, said in this session that Illinois is a key State in using WOWEE in blending career education with economic education.

"We began in Illinois three years ago," Dr. MacDowell said.

He noted that in the spring of 1974, the National Science Foundation funded the program. Lesson plans were developed first in social studies and later in home economics, distributive education, and business education, he said.

"We trained 20 key teachers who conducted in-service programs to teach other teachers," he added.

In the third year of the program, 21 separate school districts in Illinois were involved. According to Dr. MacDowell, one objective of the program was to measure attitude and to understand why others selected a vocation.

The results from WOWEE programs were "outstanding," he said, adding that students' cognitive scores were raised by 20 percent.

He concluded by noting that WOWEE orientation and training sessions have been designed for teachers, school administrators, State Department of Education personnel, professional association representatives, and other interested State and community leaders.

Session 204
WOWEE: An Experience-Based Career Education Program

Ms. Nona Thompson, Consultant for Career Education, Bangor, Maine, answers a question in a session on Career Education Practices: Rural Settings (Grades K-12).

Mr. George S. Dibble, Jr., Vice President, Public and Government Relations, Husky Oil Company, Cody, Wyoming, in a session on Career Education and the Free Enterprise Movement.

Value of College Education Drops by One-Third

Since World War II, the economic value of a college education has plummeted, due to an oversupply of qualified labor, a cutback in military and technological spending, and a recession, according to Dr. Garth Mangum, Professor of Economics at the University of Utah and Director of the Human Resources Institute in Salt Lake City.

Dr. Mangum stated, "When I was in school, the conventional wisdom was that a college degree was the key to success; now, that has almost turned around. The war produced a spinoff of defense technology. There was a vast demand for manpower. About 1970, the supply began to overshoot. Also in 1970, the space race was cut back and the Vietnam conflict was ending. At the same time, approximately 30 percent of high school graduates were getting degrees at colleges."

The boom in the number of young people attending post-secondary educational institutions was also prompted by the observation that, in European countries, those nations with the greatest growth in Gross National Product (GNP) showed the largest investments in education. Economists then pushed for a concept of "human capital" development, or instilling flexibility and knowledge in the work force. By the 1970's, however, revisionist thinking took over, and economists questioned whether the educational investments actually caused the GNP growth.

Dr. Mangum cited a drop in the economic rate of return to a college education from 12 percent of 1945 to a current low of 8 percent. He also claimed that the current rate is no longer more profitable than most capital investments.

"After World War II, the investment into college paid four times as well as the very best blue chip bonds. In terms of the 1950's and 1960's, 8 percent would still have been respectable. Now, with the prime interest rate at 6¾ percent, 8 percent is nothing to brag about," he said.

He added that the rates of return may not be totally reliable for all educational areas.

"With those figures, there is no way of separating that part of education which is consumption-oriented from that part which is career-oriented. The figures have no way of comparing degrees in business and pre-law with psychology and English," he said.

He continued, "If we're really going to look at returns, we need to differentiate by level of education, by the nature of the school, and by the major. If a young person undertakes a degree in philosophy, he is usually aware of the limited job market. For him, there is more to education than its economic returns."

Career education should be infused into the curriculum, according to Dr. Mangum.

"The professor ought to be doing something about helping kids decide what to do with their skills. The professor should know what the prospects are for his field. He/she should find a way to teach the needed job-getting and job-keeping skills," he said.

He also suggested that universities initiate a cooperative approach with business and social agencies in the form of internships. He stated that experiential learning, whether experienced by a worker returning to a college setting or by a student finishing an internship, should be assessed as a portion of the total learning process.

"The colleges are becoming more aware of mid-career upgrading and post-retirement training because they're running out of kids. A lot of people want career education; but, in order to reach them, the colleges must change their terms. They must extend themselves so that people don't have to give up jobs and homes for further education," he contended.

Dr. Mangum noted that a college education still accrues an advantage over a high school education in the job market. The average college graduate earns one-and-one-half times the income of the average high school graduate. Also, the upgrading of employment standards by employers ensures the continued advantage.

Dr. Mangum said, "The burden is being borne by those at the bottom of the educational ladder. They must ask themselves, 'Am I willing to work cheaper than a machine'?"

The economic benefits of an education may exist in work and social skills attained rather than in facts memorized.

"The real value of a college education is simply that those persons successful at *any* level tend to be successful in the labor market," said Dr. Mangum. "Career success is not just the skills to do a job. Those who go to college have already submitted themselves to discipline and learned human relationship skills."

Session 205
Economic Value of a College Education

Dr. John Kennedy, Jr., Coordinating Counselor for Adult Education, Roosevelt Public Schools, Roosevelt, New York, in a session on Career Education for Adults Undergoing Career Change or Retirement.

Insurance Company Develops Informational Series on Career Education

A new public service program, Careers for a Changing World, is reinforcing the role of teachers and counselors in helping students choose productive and satisfying careers, according to Mr. Nathan Kelne, Vice President of the New York Life Insurance Company, New York City.

The program, produced by New York Life, includes a series of booklets on different career choices, a film, and a teachers' guide for use by schools or community groups.

"The program is an attempt to do our part in helping young people find their way in useful and rewarding work," said Mr. Kelne. "It is not designed to sell life insurance," he added.

He noted that six booklets have been produced this year as part of the program. An introductory booklet provides an overview of career choice information. Other booklets focus on such occupational categories as business, hospitality and recreation, the arts, health care, and transportation. He said that 10 other booklets, on other career opportunities, will be distributed in 1977 and 1978.

The film focuses on real-life people in many different careers, as well as on high school students. In it these people describe their own lives, values, and ambitions.

Entitled "What Will I Do With My Time?", the film makes several points. It shows that each individual is unique and has special career needs and goals. It also shows that careers are the result of hard work, preparation, and previous life influences.

According to the film, almost everyone experiences doubt and anxiety in making career decisions and no decision need be final.

The people in the film represent a range of ages, ethnic backgrounds, and jobs. They include a bus driver, advertising executive, teacher, sales representative, homemaker, doctor, auto shop service manager, and many others.

"Since the film was scheduled for showings we have received over 20,000 letters and cards from educators, parents, and young people commending the program and requesting further information," Mr. Kelne said.

Mr. Henry Stockmal, Jr., Career Education Coordinator, Stratfield School, Fairfield, Connecticut, presented a case history of the program's success in Fairfield schools.

"After the film was shown to students, its effectiveness was displayed when they came back and asked to see it again," Mr. Stockmal said.

"It raised the basic question of 'Here I am now, but where am I going?' in the students," he emphasized. "The film sparked their interest in career education."

Guidance counselors in the Fairfield area liked the film so much they wanted it for their own career education programs, Mr. Stockmal added.

Session 206
New York Life Insurance Company's Role in Career Education

'Super Citizen City' Gives Second Graders Jobs

Second grade students at Rayla Elementary School in Hastlett, Michigan already have jobs. They each earn a salary and learn how to spend it wisely.

They work in a town called Super Citizen City. The borders of the town are the classroom walls of Mrs. Joyce Frank's second grade class.

Mrs. Frank discussed the town during her presentation on Career Education Practices in the Early Primary Grades.

She told participants that the town has a museum, a library, a capitol, a jail, a bank, and a post office. Every student in the class has a job and holds an elected position in the town. Students draft and enforce their own laws, write job applications, estimate profit margins, do market research, and apply for bank loans.

Mrs. Frank said it is an "education in the economics of citizenship."

She covers her classroom walls with posters depicting children engaged in different types of jobs. One poster says, "I need to work, I need to play—I need to do some of both each day."

Mrs. Frank said the major emphasis of her type of career education is teaching children how to decide what kind of people they want to be.

"Children have to learn to make decisions before they can do anything else," she said. "Most of what I do comes from what I see of my own children."

Mrs. Frank noted that she feels the decision-making process is aided by the jobs students have and the salaries they earn. The children have to decide which job they want; then they fill out an application.

"If they are qualified for the particular job, they are hired; if not, they have to decide what they need to do to be qualified. For example, the job of librarian requires that the applicant be able to read every student's name in the class," she related.

She also mentioned that once they have the job, students must make decisions while performing that job. A judge has to decide guilt or innocence, for example.

The students, or citizens, earn wages while they work. When they get paid, they have to decide how to spend their money. If they want to buy something more expensive than the amount they have, then they have to decide whether or not to save for it.

The students have to buy their own paper and pencil. Mrs. Frank

said they lose fewer pencils when they have to buy their own.

Mrs. Frank told participants that every year her class gets a bank loan to set up a business. Students do market research, asking teachers and neighbors what should be sold in their store. She said that usually the class sells candy and toys which they buy with the bank loan.

"The students learn how to sell their product by visiting a shopping center and talking to a salesperson," she added.

Mrs. Frank teaches about advertising and students sell their product after computing a profit margin.

"I find experience to be the best teacher," she said.

Mrs. Frank noted that her students participate in a variety of activities. Every year, each child writes, publishes, prints, and sells a book. Each child prepares a lesson plan and teaches the class one day. When the school has a dinner, the children work as waiters and waitresses.

The children also correspond with elected officials and corporations to get things done in Hastlett. Among other recent accomplishments, Mrs. Frank's class convinced McDonald's Corporation to locate a restaurant in the town.

Session 207
Career Education Practices: Early Primary Grades

High School English Teacher Institutes Career Education Program

Mrs. Catherine Schwarz had been teaching high school English since 1950, but she noticed in her students during the early 1970's a new apathy.

"I asked them what was wrong, and they said that school was so meaningless and irrelevant that they would rather be out. Their whole purpose with being in school was to finish as quickly as possible and get out," she said.

Disturbed by this, she has begun to make a career education program of sorts work through her own experiences at Howell High School in Howell, Michigan.

"It began when I asked my students to bring me what they wanted to read, and they were magazines about cycles, cars, and sports. Then we really discussed them seriously and I learned that it was possible to get through to students," she said.

That summer she went to the University of Michigan in order to learn more about relating education to students. She found that she was not alone in her perceptions that education had to take a dramatic new turn.

Since then she has initiated the career education program at Howell High.

"I asked my students to brainstorm and list on a sheet of paper all the careers and occupations that, first, they were interested in, and second, were feasible. I then asked them to put a priority on their lists and concentrate on one of their four top choices for each academic quarter; the careers became subjects of research papers which they turned in at the conclusion of each quarter," she said.

Aided by Mrs. Schwarz, students learned appropriate use of the current *Occupational Outlook Handbook*, issues of the *Occupational Outlook Quarterly* and both volumes of the *Dictionary of Occupational Titles*. Other sources of information used included the school media center and guidance offices, public library, local business establishments, private employment agencies, and the State Employment Service. Students also sought help from parents, relatives, and friends.

Especially rewarding for students were the required interview each quarter with at least one person already performing the work being studied and guest speakers who spoke regularly to the class.

Since it was such a new concept in the area, she asked her students to give their views on the program.

"I've learned that there's more to a job than just a title," wrote one. "Working on careers has made me ask questions about my career, some of which I never thought about asking before. It also made me talk to people I hadn't thought I'd meet; but now that I have, I consider them to be my friends."

A secondary outcome of the course came in the writing of the project reports, which Mrs. Schwarz emphasized had to be in good form.

Currently three of the five English classes Mrs. Schwarz teaches are working on similar career research projects, adapted in minor ways.

"Although both Federal and State legislation and funding are needed," Mrs. Schwarz writes, "neither Washington nor individual States can make career education prosper. Career education will only succeed when millions of classroom teachers find it valid and make it their own."

Session 211
The Secondary English Teacher in Career Education

From left, Miss Lisa Sanfelippe, Student, Lafayette High School, Brooklyn, N.Y.; Mr. Mario Herrera, Executive Director, Uptown Manhattan YMCA, New York, N.Y.; and Mrs. Rosemarie Siragusa, Education Chairperson, New York State PTA, Yonkers, N.Y., in a session on Parents in Career Education.

Social Studies Teacher Promotes Student-Community Interaction

Ms. Julie Jantzi, a teacher in the Milford public schools, Milford, Nebraska, told participants in a session on the Secondary Social Studies Teacher in Career Education that her approach to using career education as a motivation tool centers around the utilization of community resource people who can provide students with valid information. In order to promote this type of exchange between student and community, she suggested the use of a project that will provide a real and interesting reason for the student to deal with the resource people.

Ms. Jantzi's class unit was planned around an activity involving the plans for landscaping of a median in the city. Resources from throughout the community were needed. The students came in contact with the mayor, council, commissioners, police, zoning officials, and the local community college's civil engineering and architectural departments. Formats for drafting designs, as well as a large variety of materials on landscaping and gardening and seed catalogues, were placed in idea centers where students could make use of them. As a result of the project, the city council and the family donating the money for the landscaping of the median incorporated several of the students' proposals for the final design. The students raised money to buy a flag, a flagpole, and a plaque for the median.

Ms. Jantzi also emphasized student involvement with the community. She cited examples in her school that included three youths teaching physical education to kindergarteners and first graders, a girl working in a florist's shop, and a potential farmer working with a local farm manager.

Dr. Armand Magid, Career Education Coordinator and Social Studies Department Head at Woodrow Wilson High School in San Francisco, California, spoke briefly about a project funded by the government to fuse academics with the career education component. This program involves 13 students who attend schools two days and work three days in banks, he said.

Session 212
The Secondary Social Studies Teacher in Career Education

Philadelphia Provides Career Information in Elementary and High Schools

Philadelphia's school districts have a number of career education programs designed for all grades and one which concerns high school dropouts or potential dropouts.

Three key members of the career education movement in Philadelphia addressed participants at the career education conference.

Dr. Robert Scanlon, Executive Director of Research for Better Schools, Philadelphia, Pennsylvania, described a career education program for high schoolers called the Academy for Career Education.

Next, Dr. Charles Peoples, Director of the Urban Career Education Center, Philadelphia, Pennsylvania, gave an account of his organization's career education program for dropouts or potential dropouts known as the Career Intern Program.

Finally, Mr. Theodore Woal, Supervisor of Vocational Guidance for Philadelphia's school districts, described the career education program for students in kindergarten through sixth grade called Room to Grow.

According to Dr. Scanlon, the Academy for Career Education is part of the high school program.

"Because it is experience-based career education, the academy is the bridge between the high school and the adult world," he said.

The three parts of the academy, Dr. Scanlon explained, are the career development program, the guidance program, and the academic resource center.

According to Dr. Scanlon, the student selects a broad area of careers such as health, communications, or manufacturing in the career development program. Having done this, the student meets with workers in their respective fields one day a week. Then the student bases his or her course of study on the broad career area that he or she has selected.

The guidance program includes individual and group counseling as well as courses for students at the academy. These courses are called guidance groups and meet twice each week.

"The guidance groups help students make the transition to the academy's different courses and ways of learning so they can benefit more fully from the experience," Dr. Scanlon said.

The academic resource center provides a wide variety of programs in English and mathematics for students in the academy, and also helps students learn how to select and follow a course of study based on their own interests and needs.

Next, Dr. Peoples told participants that high school dropouts or potential dropouts may enroll in the Career Intern Program.

Dr. Peoples explained that interns enroll in two hands-on programs. Through individual counseling, each intern selects the career development program best suited for him/her.

According to Dr. Peoples, "The nursing intern who decides, after emptying the first bedpan, that nursing is not for him or her has another option."

Dr. Peoples pointed out that graduates of the Career Intern Program can go on to college or to vocational schools.

In describing the Room to Grow program, Mr. Woal

said, "Room to Grow tries to make apparent the need for long-term career planning."

He explained that there are six phases to the program, including teacher-guided projects, dialogue with workers, student projects, trips into the world of work, community involvement, and cocurricular activities.

These phases have produced many different activities. Mr. Woal mentioned that some teachers have established special bookshelves on careers in the classrooms, and that some schools hold community nights when speakers from different professions speak to students, parents, and teachers.

Session 214
Career Education Practices in Large Urban K-12 Settings

Three-Module Career Education Kit Developed at Texas A&M

The Center for Career Development and Occupational Preparation, College of Education, Texas A & M University, has developed a portable, three-module career education kit for use in teacher pre-service training.

According to Dr. Christopher Borman, Center Director, the kit (known as Career Education for Student Teachers: Training Model) is aimed at the neophyte teacher who likes the idea of career education but does not know how to go about it.

He commented that the College of Education had career education courses on the graduate level, prior to the development of the model, but said it was felt that career education should be in the undergraduate program as well.

In presenting the model, Dr. Borman quoted Dr. Kenneth B. Hoyt, Director of Career Education, U.S. Office of Education: "It (career education) needs support and leadership of teacher education faculties to survive."

Dr. Borman stated that the model has been pilot-tested at Texas A & M, and the center now hopes to distribute it to various universities in Texas to field-test it. The objective of the model is to provide methods for the student teacher to use in teaching, he said.

Ms. Sharon Colson described the model's contents. Module I provides orientation to career education, in two parts. Part 1, intended for department heads or teacher educators, deals with the process of examining the appropriateness of the model. Part 2 is "designed to acquaint student teachers with career education in a general way." One videotape is included in this module.

Ms. Colson said that Module II covers classroom processes and resources. Part 1 covers the identification and utilization of community resources. (A videotape is included.) Part 2 describes classroom activities which can be infused with career education concepts. Part 3 describes library and commercial resources for career education.

Noting that Module III is devoted to curriculum, she stated that Part 1 deals with the roles and responsibilities of school and community personnel. It includes a set of transparencies and script to present various groups' roles. Part 2A covers infusion of career education into the elementary curriculum, and Part 2B into the secondary curriculum. Parts 3A and 3B cover Mini-Make-It-and-Take-It workshops for grades K through 6, and for 7 through 12. Ms. Colson said that two videotapes present teacher-made materials that can be started and finished in a 50-minute class period by the student teacher. She added that complete instructions are provided the teacher educator for conducting similar activities in the classroom.

A film was shown of undergraduate education students in classes at the university employing some of the career education processes in standard classes such as geography and science.

Session 215
Career Education Practices: Teacher Education Institutions

Ms. Terrill Gormly (left), Teacher Specialist for Internship Programs, and Mrs. Lois Parker, Coordinator, Career Education, both from Montgomery County Public Schools, Rockville, Maryland, in a session on Designing and Implementing a Senior High Career Education Resource Center.

Mr. Luke Trahin, Chamber of Commerce, Morgan City, Louisiana, in a session on The Chamber of Commerce in Career Education.

Volunteers Play Important Role in Career Education

In a session on Volunteerism in Career Education, Dr. John Alden, Executive Director of the National School Volunteer Program, Inc., Alexandria, Virginia presented an overview of the work of his organization.

"About 20 years ago, public educators in New York came up with the idea of involving parents in the public schools in a more structured way," he began. "Out of this movement, the National School Volunteer Program was developed. The headquarters of the program are in the Washington, D.C. area and the program has held five or six national conferences to date. The program is now in a position to work on an organized basis to continue to bring citizens into the schools, or children into the community, to increase the children's interest and awareness in relation to business and careers."

Dr. Alden went on to say that of some 37 million people in the country who work on a volunteer basis, about 15 percent of these (as of 1974) were involved in education. He added that schools are becoming increasingly interested in involving community members, not only on boards and in PTAs, but also in a broad range of activities, on a regular basis.

The National School Volunteer Program, which is a membership organization, has three divisions relevant to volunteer programs. The first of these is the Information and Publications Unit, whose primary publication is *The School Volunteer.* Other publications, such as "how-to" manuals, are also developed and disseminated through this unit.

The second area Dr. Alden referred to is the Clearinghouse. The Clearinghouse serves the numerous people who would like to share their ideas and materials on school volunteerism. Its staff organize and catalog materials covering a wide range of what volunteers do in school. The Clearinghouse also works with commercial businesses to offer products at discount.

The third unit of the National School Volunteer Program described by Dr. Alden is the training program. Through this program, the national organization works with people at the district level to develop skills. It also helps boards and administrators expand programs.

Dr. Alden closed his presentation by listing three significant priorities of the program:

1. Promotion of business-industry-education involvement.
2. Calling attention to the large number of older citizens who may be used as volunteers. This includes the use of a multi-media presentation to show ways in which older people can be involved, and a booklet which summarizes the presentation. (Dr. Alden pointed out that about 9 percent of the people over the age of 55 are participating in education, and that in the future there will be an even larger percentage of older people who are healthy, able, and willing to work on a volunteer basis.)
3. The development and use of a brochure which summarizes the functions of the National School Volunteer Program.

The next speaker was Dr. Audrey Jackson of Miami, Florida, President of the NSVP. Pointing out that volunteer programs already in existence were a great resource to those who wished to develop programs of their own, she referred to a program in Minneapolis, Minnesota used as a model for the program which she helped establish in Miami.

Dr. Jackson addressed several important aspects of the role that volunteers may play in career education. She also outlined the development of the Dade County, Florida program.

In response to the question, "Why should we have volunteers in education?", she stated that:

1. Volunteers add enrichment and depth to children's education that would otherwise not be there, and contribute to their academic achievement. (She cited as an example the fact that in 1973-74, there were some 150,000 students in Miami who were at least one grade level behind in reading and who showed gains after being tutored for a 7-month period by volunteers.)
2. There can never be enough individualized attention in grades K-12 if it has to be bought. The use of volunteers who give their time to tutor can greatly increase the amount of individualization. She pointed out that teachers and their unions need to know that volunteers are an additional resource, not a replacement, and added that job descriptions for volunteers can be valuable in this area.

Dr. Jackson next turned to the question, "Why should business be involved in volunteer programs?" She said that business is able to provide new resources to the educational program in such areas as having representatives on administrative boards in order to give input for the program, making services available for printing of training booklets, newsletters, etc., and contributing money for travel for training purposes.

In response to the question, "Who benefits from using volunteers in education and career education programs?", she said that the students not only increase their levels of academic achievement, but also benefit from the modeling provided by the volunteers.

"When students see an adult come in to help them on a personal level, without pay, it provides them with an example which they may some day follow," she said. "Volunteers can also aid in career education by discussing their own careers and experiences."

Dr. Jackson also stated that career education could be channeled through a community resource guide which would make people available to help students. In addition, she pointed out that school volunteers who work regularly with children get an in-depth look at the school system, and that this increased knowledge tends to build a broader base of support for the system. The children, the school system, and the community are all beneficiaries of volunteerism.

The question, "How can business get involved in

educational programs?" was discussed next by Dr. Jackson. She pointed out that businesses are often service-oriented; if a program is presented to them in a manner showing what will be gained through their participation, they will usually aid in a volunteer program. Therefore, she continued, it is important to consider how an appeal should be made and tailor an approach to a specific business or industry. She added that the NSVP has developed new approaches to involve business.

The final portion of Dr. Jackson's presentation was a description of the pilot program developed in Dade County, Florida. In 1971, the Dade County schools had a strong PTA which cooperated with them in obtaining volunteers. She said that there are now over 9,700 regular volunteers, working in grades K-12, by appointment, with 32 people on the program staff. She added that funding was obtained through local school monies, foundations, local service organizations, etc.

Dr. Jackson next described a program called "Step Into Business," which is currently implemented in four schools, an increase in one year over a program in only one school. This program was developed by the school system and the Chamber of Commerce to give students at the high school level the opportunity to participate in business. The Chamber had discovered, through an informal survey, that many students had a negative attitude toward business. People involved in all types of businesses, professions, and trades were asked to help, and students enrolled in the course (an official one in the schools where it was offered) were given firsthand information and experience in the community about a wide variety of career choices. The school system and the business community saw this program as a laboratory experience in the free enterprise system.

Following a slide presentation illustrating the "Step Into Business" program, Drs. Alden and Jackson answered questions from the audience. In reply to a question regarding the training of volunteers in areas where they have no previous experience, Dr. Jackson said that the volunteer jobs are listed in 20 categories, and that various kinds of training methods are used for each category. She noted that tutors in reading and math are given from 8 to 20 hours of highly specific training, while a volunteer who wishes to assist in library work is given training on the job.

In response to a question relating to funding, Dr. Jackson pointed out that Dade County has been very "pro-volunteer," and that in increasing the program, had obtained a Title III grant to develop delivery of services. She added that there is a national dissemination network which may be used to discover what monies and resources are available for beginning school volunteer programs, and pointed out that both Boston and New York rely to a large extent on private monies. She also suggested that a nonprofit, private organization might be used to raise funds for volunteer programs.

In closing the session, Dr. Jackson mentioned one other aspect of the volunteer program in Dade County, the Turn About program, which uses students to tutor other students, thus bringing enrichment to both groups. She also stated that the School Volunteer Development Project in Dade County was providing training for those interested in developing projects.

In relation to school volunteers in career education programs, Dr. Alden and Dr. Jackson agreed that, because it is apparent that everyone involved benefits, these programs literally "sell themselves."

Session 220
Volunteerism in Career Education

Davies Says Positive Thoughts and Actions Determine Principals' Success

In discussing the role of career education in elementary schools, Springfield, Oregon Principal, Mr. John Davies, called for teacher motivation and understanding.

"Everything we say or do affects children," Mr. Davies stressed. "Through career awareness, we increase student awareness."

Mr. Davies said that he is a firm believer in the strength and uniqueness of the individual and attempts to encourage the power of positive thinking and meaningful reinforcement.

Defining the role of principal as "a resource manager," Mr. Davies explained that changes can be implemented directly from the principal's office. He said he believes that career awareness is concerned with providing opportunities for students to participate actively in decision-making that relates to career development, discovering occupational aptitudes and interests, identifying individual learning styles, and expressing self-awareness as it relates to career development and occupational interests.

With regard to staff, Mr. Davies said he feels that each individual's job should be defined, including expected program outcomes; that staff members should participate in the decision-making process; and that staff should be allowed to exercise autonomy and creativity in order to manage their classrooms.

"Don't let worry, doubt, and lack of confidence erode your staff," Mr. Davies said. "Think positively, see yourself as valuable, be optimistic, help others, express yourself, enjoy new challenges and doing things well, be aware of your values, and accept compliments."

"Mistakes are stepping stones to achievement," he continued. "Children need time to discuss the beauty of each day. Give them private praise and encouragement."

Mr. Davies concluded by saying that he wants his teaching staff to be enthusiastic, have faith in themselves, take action, and be resourceful.

Session 221
The Elementary School Principal in Career Education

Ohio Presenters Advocate Guidance From School Boards for Career Education

The school board, as policy-maker, must provide some guidance in the career education process, according to Dr. Robert F. Jackson, President of the Toledo, Ohio Board of Education, and Mrs. Margaret Bauman, President of the Warren, Ohio Board of Education.

Mrs. Bauman told participants that in the Warren system there is a task force for career education, made up of parents, students, administrators, teachers, and board members. The task force helps determine the scope of career education and, in conjunction with local resources, recommends priorities to the school board.

She noted that the school board, on the other hand, may give the task force a specific problem to study—e.g., vocational skills (how much emphasis should be placed on them, etc.).

In addition to the task force, Mrs. Bauman related that the Warren board maintains a career education orientation series to inform the community "what career education is and why we need it."

She commented that the board also provides counselors who visit homes, and it holds seminars in which heads of industry meet students and discuss various aspects of industry applicable to career education.

Dr. Jackson discussed the differences between the old idea of career education (apprenticeships, etc.) and the present concept.

"You have to leave options open by exposing the students to a great number of alternatives. The board member should have an idea of the work and knowledge of the available alternatives," he said.

Session 223
The School Board Member in Career Education

Superintendents Promote Career Education Programs by Leadership

"A superintendent has to have the courage to give freedom to staff members to work on and develop career education programs," said Mr. John Van Zant, Project Director for California's Manpower Management Information System.

In a session entitled The Superintendent in Career Education, Mr. James F. Cowan, Ventura County, California Superintendent of Schools, and Mr. Van Zant emphasized the leadership required of a superintendent in developing a career education program.

Using the Ventura County school district as an example, Mr. Cowan showed how a superintendent can promote a career education program.

Mr. Cowan explained that in 1965 Ventura County started to set up a regional occupation program and in 1970 a tax was levied in support of the program.

"After the tax levy we realized that what we were doing was actually part of career education," Mr. Cowan said.

Mr. Cowan noted that to begin the program, in 1972 teachers were brought together for a 4-day workshop. He explained that the workshop resulted in "some friends who were willing to work in support of career education." He continued by saying that to gain additional support, a workshop was also organized for school boards.

The county then formed a team of directors to find a place for career education and to seek public and financial support for a program.

"The main complaint facing the county was a lack of financing and resources needed for the program," Mr. Cowan said.

To circumvent this problem, directors found a teacher who had already developed a career education program for her class by setting up a small-scale business for the class without the use of outside finances.

Mr. Cowan noted that to help other teachers implement career education techniques in their classes, the team of directors developed 11 different learning packages, each setting up small company situations.

"Another problem facing us was the lack of resource material," he said. "We then established a career education library and developed a resource guide giving business contacts and speakers for career education programs."

The easiest way to promote career education is to organize conferences, seminars, and workshops, according to Mr. Cowan. He related that the county formed a local administration council to redesign the career education program so that business and industry could attend the workshops.

"We've extended our program to include work groups, business, and the PTA to gain more support and resources," Mr. Cowan said.

Next, Mr. Van Zant conducted a slide presentation to show how the county brings the business world to students.

One tool explained by the slide presentation is the Student Career Planning Profile.

By means of a questionnaire, the profile estimates the abilities and occupational interests of the student. Since the profile is sent to the student's school, it helps provide better occupational counseling.

The slides also illustrated the use of vans to visit local schools and plan career education centers and a career evaluation counseling program in which students actually try out different occupational tasks.

Mr. Van Zant also discussed the job research centers, where students meet employers to talk about the business field and job opportunities.

He noted that Ventura County also has a program to train students for summer employment to earn money to return to school.

Session 224
The Superintendent in Career Education

Efficient Staff Management Crucial to Career Education

That the success of a career development program depends largely on the development of efficient staff management is a point that Ms. Jama Roman, Supervisor of the Toledo, Ohio public schools' career development program, and Mr. Nicholas Topougis, Coordinator of the career program for Akron, Ohio public schools, agree upon.

When it came to light that the career education booklets distributed to teachers in Akron were not being used, education and labor began a cooperative effort in the form of advisory committees, explained Mr. Topougis.

Along the same lines, Ms. Roman stressed the need for a strong communication system, both internally in the schools and externally, through membership on school boards and literature made available to the community at large. She also suggested communications through newspapers, radio, and television.

Mr. Topougis elaborated on the importance of advisory groups and called the business and labor representatives the "power structure of the groups" because they offer direction and assistance.

Ms. Roman told participants that advisory committees "attract the most powerful, influential people. . . .Find someone to sell your program." She suggested the involvement of organizations like Junior Achievement, Parent Teacher Associations, Women's Leagues, the National Alliance of Businessmen, and the Chamber of Commerce.

Ms. Roman and Mr. Topougis did advise, however, that career education programs avoid overtapping one resource. They also discouraged placing all of the support groups on the advisory committee because some are only used once a year.

Both speakers advocated serious assessment and evaluation, both internally and from external sources. The contention was that such practices measure growth and aid in future planning by revealing strengths and weaknesses of the program.

Session 226
Systematic Management of Career Education

Albuquerque Chamber of Commerce Initiates Career Enrichment Center

In 1973, the Education Committee of the Greater Albuquerque, New Mexico Chamber of Commerce secured the assistance of an executive with Mountain Bell Telephone Company to develop a "viable and realistic" career education program.

According to Ms. Betty Mae Hartman, Vice Chairperson of Business, Industry, Labor, and Education of the Greater Albuquerque Chamber of Commerce, the concept of the career enrichment center was adapted from the ideas of Dr. Sidney P. Marland, Jr. which were presented at a 1973 national career education convention in Washington, D.C.

The Albuquerque center includes 14 career clusters or groupings of individual occupations from which the students may choose.

Ms. Hartman stressed that the career center is not a high school.

"A student begins a career and may branch off to others, but obtains his grades for working through the center," she said.

Offered facts and information about jobs and opportunities in and outside of the community, the student is presented with a larger, comprehensive choice of jobs.

"Since we know that the world of work can appear very frustrating, the student is supplied with counseling and support to make the correct decision," she said.

Mr. G.Y. Fails, Executive Vice President of the Greater Albuquerque Chamber of Commerce, noted that presenting students with better information concerning jobs and employment will lead to a fulfillment of goals and interests in their career choices. Another important aspect of the career program includes involvement of business and industry as early as possible, he said.

Mr. Fails called education a primary vehicle in raising the standard of living and furthering economic development in Albuquerque and all of New Mexico.

Funding of the career program is 90 percent from the State, and no Federal funds are supplied.

With a high majority of graduating students from the center attending college, both presenters agreed that the center supports and reinforces college decisions.

"The career enrichment center is the Chamber of Commerce's assurance that through improved and advanced education/employment services, Albuquerque is becoming and will remain a better place to live," Ms. Hartman said.

Session 230
The Chamber of Commerce in Career Education

Panelists Describe NAB Career Education Efforts

Mr. J.O. Woodrick, Vice President for Youth Programs, the National Alliance of Businessmen (NAB), Washington, D.C., chaired a session on The National Alliance of Businessmen in Career Education.

Mr. Woodrick began by noting that the NAB is an organization demonstrating a partnership of business, industry, labor, and education resources. Established in 1968 in response to the Johnson administration's request to provide jobs in the private sector for the hard-core unemployed, disadvantaged adults, the NAB has served as a catalyst provoking corporate action addressing unemployment problems.

Mr. Woodrick stated that the NAB is composed of over 80,000 American organizations, ranging in size from "Mom and Pop" stores to corporate giants.

Noting that there have been many cooperative efforts with various Federal, State, and local agencies, Mr. Woodrick told participants that the newest partner to join the NAB has been the education sector.

"The youth program (one of four programs under NAB auspices) is closely associated with career education," Mr. Woodrick said.

He explained that elements of the youth program include the career guidance institute, a youth employment component, a youth motivation component, and a college/industry relations component.

The next speaker was Mr. A.J. Ballard, Community Relations Supervisor, Southern New England Telephone, Bridgeport, Connecticut.

Mr. Ballard described his involvement in the vocational exploration program, which has a career education orientation.

He said that the purpose of the program is to encourage employers to hire a number of disadvantaged youth during the summer months and to provide them with an opportunity to explore various vocational areas within the employers' facilities.

"The program ensured that each of the 236 students participating in the program in 18 different cities in the summer of 1976 was exposed to eight or nine different occupations," Mr. Ballard said.

He noted that a final report on this pilot program is currently being prepared, and to date the feedback has been positive.

Although he said he hopes that the program will be expanded to involve 50 cities, he said it will definitely continue as a pilot program.

Ms. Rose Wheeler, JOBS/Youth Manager, NAB, Washington, D.C., elaborated on the Washington, D.C. vocational exploration program. In this 15-day program, three days of classroom sessions were devoted to the subjects of economics, free enterprise, and job hunting. Then students observed the "behind-the-scenes" operations in fields such as telecommunications, banking, and the media.

"In all, the students saw over 60 different types of possible careers," Ms. Wheeler said. "The basic message to the students was, 'Start now to choose a career so that you may pursue your goals'."

Ms. Lorraine Whipple, Administrative Director, Youth Programs, NAB, Washington, D.C., explained the NAB's career guidance institute as being a "locally designed in-service program for teachers and counselors." She said that the institute provides teachers and counselors with information related to the world of work and learning as well as an awareness of the problems in the world of work through the participation of local business people.

Ms. Whipple noted that there are three options available under this program: (1) one 60-hour institute, (2) a concentrated 40-hour institute, and (3) a 1-day leadership course.

"The participants are exposed to classroom work and field observations," Ms. Whipple said. "They are able to explore a variety of jobs and examine the job characteristics and skills needed in particular industries."

Ms. Genevieve Tucker, Metro Director, Southwestern Washington, NAB, Tacoma, Washington, told participants about the institute held in Tacoma last year which took the form of a leadership conference for business, students, and teachers.

"The result of the individual sessions was to involve high school students in identifying and vocalizing their needs," she said.

Mr. Woodrick added that industry-education committees are important because they provide a vehicle for continuing dialogue between two areas and "reach beyond the school and teacher with the career guidance institute, into the classroom."

Ms. Wheeler concluded the session with a brief description of the youth motivation task force, which involves speeches by area business and industry representatives stressing to students the importance of career goal-setting and staying in school until graduation.

"In Washington, D.C. alone, we have been able to reach 8,000 students through such things as career days, rap sessions, and seminars," she said.

Session 231
The National Alliance of Businessmen in Career Education

Cooper Says Career Education Helps Black Americans Acquire Skills for Today's World

Thirty million black Americans are alive today, representing one of the most talented, wealthiest pools of black people in the world, said Mrs. Delores J. Cooper, Career Education Coordinator in the Cleveland, Ohio public schools.

"Black Americans are in the position where we do not have to permit the ravages of racism to affect us," Mrs. Cooper said, referring to the firing of former Secretary of Agriculture Earl Butz following racist remarks.

"We have acquired a political sophistication and the skills necessary for a modern world," she continued, referring to Congresswoman Barbara Jordan of Texas as an example.

Despite these advances, Mrs. Cooper said that blacks today are faced with low morale and frustration, and unemployment continues at high levels for young black Americans.

"Because the job market is not keeping up with the number of new workers, employers are finding young people looking for jobs without the motivation or skills to work," she added.

Mrs. Cooper contrasted the overall unemployment rate of 7.9 percent in August 1976 to the unemployment rate for young blacks (aged 16-24) of 40.2 percent at that time. This was about twice that of young whites for the same period, she said.

"Career education can help black Americans gain skills to adjust to a changing job situation and to acquire skills needed to get employment," she stated. "A good career education program can give black Americans a feeling of self-determination, creativity, status, and a desire to go higher. . .Many students, black and white, have many capabilities and are not interested in a 4-year college program. Are they doomed to unemployment, unfulfillment, and unsuccessful lives?"

Mrs. Cooper noted that the scope of career education is broader than that of vocational education because career education stresses preparation of work beginning in the early school years through grade 12.

According to Mrs. Cooper, a good career education program can help black Americans compete by:

1. Developing a positive self-image in black children based upon the knowledge that they are useful, contributing members of society.
2. Creating in each child the realization that work has dignity and is a social necessity.
3. Providing, whenever possible, experiences with real work situations within the home, school, and community.
4. Acquainting each child with broad scope career opportunities and the materials available.
5. Providing opportunities and experiences necessary to enable each child realistically to appraise his/her own abilities in the selection of a career.
6. Making each child aware that she/he is a consumer as well as a product in the society.
7. Creating positive attitudes toward employment, a desire to raise one's standard of living, and a concern to minimize inequalities in our present system.
8. Instilling in teachers, administrators, and employers the need to become involved in teaching children about work.
9. Developing in each child the knowledge that work is competitive and discriminatory.
10. Impressing upon each child that the process of education is not terminal, but that he/she must continue to remain abreast of new innovations in his/her career.

Mrs. Cooper told participants that in Ohio career development is not taught as a separate subject, but is incorporated into all curriculum areas at all grade levels and involves more than just hearing about jobs.

"We work with the 15 U.S. Office of Education occupational clusters. Each teacher teaches careers in his/her own subject area. Career education is an everyday thing, not just a 6-week unit," Mrs. Cooper added.

She then explained the seven developmental areas which have been identified in the Ohio career development program. Each element represents a complex area where career education learning can and should occur.

1. ***Self***–Helps students know themselves and their attitudes and evaluate themselves in terms of interests, aptitudes, achievements, and values.
2. ***Individual and Environment***–Develops understanding of students in relation to their environment. Students learn their role in home, school, community, and work; why people work; and the relationship between environment and work.
3. ***World of Work***–Helps students learn the nature of occupations and perceptions related to work values.
4. ***Economics***–Helps students learn the economic process and its relationship to them as income earners and disposers of that income (consumers).
5. ***Education and Training***–Helps students develop awareness of the relationship between education and training and recognizes the need for specific education and training for specific career roles.
6. ***Employability and Work Adjustment***–Helps students develop patterns of behavior necessary to enter, maintain, and progress in a career.
7. ***Career Decision-Making***–Assists students in developing increasing skill and experience in the rational process of decision-making and accepting the responsibility for the outcome of their decisions.

Mrs. Cooper said that blacks need to develop the skills described in these seven areas of a good career education program in order to enrich their life possibilities.

Session 233
Career Education: Black Americans

Project EPIC Helps Disadvantaged in Jefferson County Public Schools

In the process of implementing a career education program that would benefit all children of the district, educators in the Jefferson County public schools, Louisville, Kentucky, conducted a needs assessment for the economically underprivileged children of the district. As a result, they found that reading and math scores were not at grade level, inability to make long-range plans was evident, and unemployment in the underprivileged group was high.

"The task, then, was to come up with a program, K-12, that would be developmental, sequential, part of the teaching-learning process, but also relevant to the world of work," said Mrs. Barbara Preli, Director of Jefferson County's Career Education Office.

According to Mrs. Preli, each component of the model program in Jefferson County known as Educational Preparation for Involvement in Careers (EPIC) has been analyzed as to whether it meets the academic, social, career, and self-concept needs of the low-income student.

She noted that an internship experience is available to all interested students during the eleventh and twelfth grades. This is a non-profit work experience, the terms of which are defined by a contract. The school's counselors and a community placement counselor work together to place seniors, upon graduation, in college or post-secondary programs, or to provide them immediate job entry.

Cooperative work experience at the high school level is also available through a business and office program, distributive education, occupational work experience, a work study program, and the Neighborhood Youth Corps.

Throughout their education in Jefferson County public schools, students are provided vocational counseling to assist them in developing their maximum occupational potential.

By the 1977-78 school year, Mrs. Preli related that Project EPIC will be in operation in all 170 schools of the Jefferson County School District.

Session 234
Career Education:
The Economically Disadvantaged

Labor Fights for Bigger Role in Career Education

Labor has a long history of helping people, especially the disadvantaged, become involved in the world of work, Mr. John Burnell, Director of the Office of Labor Relations, City of New York, said to convention delegates.

Mr. Burnell, followed by Mr. Fred Koury (Director of the City As School program in New York City) and Mr. Morris Shapiro (Vice President for Vocational High Schools, New York's United Federation of Teachers), spoke of how various labor programs might be integrated into a total career education project.

Mr. Burnell commented that New York unions had the goal of putting youngsters in meaningful jobs. According to Mr. Burnell, an 18-week program to accomplish this was successful and, after starting with 40 youths, had expanded to 300.

"The hardcore unemployable were the hardest to help," he said.

He related that the labor council, using funds from the human resources element of CETA, originated this program, which the New York City Department of Education aided.

In Mr. Burnell's opinion, the "enormous groups of unemployed youth will get money one way or another." He said that the nation runs the risk of helping to form a permanent criminal class unless career education reaches everyone.

"Let's roll up our sleeves and get to work," he concluded.

Mr. Shapiro, the second speaker, emphasized that career education does not purport to eliminate the academies or colleges. He said that career education aims to offer all youngsters career and academic skills for college.

Mr. Shapiro suggested that previously the educational system has been "unnecessarily oriented to the 20 percent of the youth who go to college." He said he feels that the 80 percent who don't attend college have been ignored.

"Now, in the current economic situation, the nation has seen the advent of Ph.D. welders. A degree is desirable, but anything else isn't less so," he added.

According to Mr. Shapiro, labor's role is to endorse career education while monitoring it.

"Labor should ensure that youngsters stay in school and that the minimum wage is not sabotaged," he said, "and labor should have more input into vocational advising and cradle-to-grave education."

Mr. Shapiro noted that full employment will allow labor to increase the number of certified vocational education teachers, but he added that labor should also help devise safety and teaching standards as well as monitor the private schools. Ultimately, he said he believes that a program must be devised providing equal opportunity, centralized job data banks, job mobility, and continual (K-12) job development.

The City as School program puts people out in the field, Mr. Koury said. He cautioned that effective coordination among such programs is needed to ensure that "working people are not replaced by low-paid youngsters."

Noting that labor is concerned with the total picture of social, family, and economic responsibilities, he called for labor's role in career education to be expanded and suggested that labor representatives serve on the National Advisory Council for Career Education.

Session 236
Labor Unions in Career Education

Utah Program Uses Modular Units to Infuse Career Education Into Industrial Arts Curriculum

Mr. Joe O. Luke, Industrial Arts Specialist for the Utah State Board of Education, spoke about Utah's Industrial Arts Career Exploration (IACE) program for infusing career education into the junior high school curriculum.

"The program is designed," Mr. Luke said, "to provide individualized, hands-on, learning experiences for students and to make industrial arts learning relative to careers."

He explained that the program consists of 45 modular units which are organized around four industrial-based clusters: construction, manufacturing, industrial communication, and transportation.

He outlined three phases of the program. The modular structure concept is the first phase developed for Level I, the seventh grade. This consists of 45 different units, each designed for a specific job in one of the four clusters.

Describing the units as coeducational and designed for successful hands-on experiences, he added that they incorporate multiple instructional strategies and are designed to encourage initiative and personal responsibility.

Career-related information about each occupation, the job the person actually performs, the educational and training requirements for the job, and the salary ranges are all a part of the IACE curriculum, he noted.

Mr. Luke discussed the Career Activity Package System (CAPS) developed for Levels II and III (eighth and ninth grades). He said that the career activity packages for Level II are pre-designed, simple individualized career activities that include career-related information and student project directions.

He noted that the Level III career activity packages are more complex than Level II and provide a system whereby advanced students can research and design their own personal career-related projects and activities.

Mr. Luke stated that the seven school districts using the program hope to implement IACE in other districts in Utah. He added that the system seemed to work especially well with mentally retarded students.

He said that the program is organized by seven school districts and the Utah State University Industrial and Technical Education Department under the jurisdiction of the State Board for Vocational Education.

The next speaker, Dr. Stanley Leavitt, from the Alpine School District, Orem, Utah, emphasized the importance of the family in helping the young to understand the value of establishing personal goals. Dr. Leavitt mentioned that if a goal contract for different personal goals is made early in the child's life with his parents, this helps acquaint a child with the goal process so that she/he can make decisions on a career-oriented level later in life. Dr. Leavitt concluded that it is important and valuable for young people to observe different jobs and work settings.

Session 237
Curriculum-Infusion Approaches to Career Education (Grades K-12)

EBCE Programs Link Schools With Industries

During the past few years, a great deal of interest has been evidenced in on-the-job training. Two experimental Experience-Based Career Education (EBCE) programs now being employed in Los Angeles are the Regional Occupational Program (ROP) and the High School Involvement Program (HIP).

In his introductory speech, Dr. Ronald Buchnam, Senior Associate, the National Institute of Education, Washington, D.C., spoke of the EBCE program as a means of "tying together schools with a number of industries." Such programs are also a source of manpower and allow students to make a commitment to the community, he added.

Mr. Ted Kimbrough, Administrator of Career Education for the Los Angeles Unified School District, made the opening presentation. Speaking about career education in Los Angeles, he emphasized the hands-on concept, a process in which a student learns by doing.

Mr. Kimbrough briefly outlined the ROP and HIP programs in which 5,000 skilled volunteer teachers from industries took part in an attempt to "give young people an exposure to potential careers."

He described ROP as a high school program designed to provide vocational and technical instruction to students, in order to prepare them for immediate employment or enrollment in advanced training programs. He noted that some organizations participating in ROP are: Sears, Roebuck, and Co.; the North American Rockwell Corporation; the Prudential Insurance Company; the Los Angeles Printing Bureau; and the Northrop Aircraft Corporation.

Dr. Charles Denova, Manager of Employee Training of the Northrop Corporation, Aircraft Division, Hawthorne, California, addressed those present about the HIP program at Northrop.

"It is a unique educational experience designed to provide high school seniors with practical, on-the-job training by Northrop professionals," he said.

Dr. Denova told participants that the program, open only to second semester seniors, was begun in 1971 with 15 high schools participating.

He explained that the program is offered once a year, beginning in February. Students are bussed to Northrop at 1:30 and leave at 3:30 p.m., five days a week, for 16 weeks or a total of 160 hours. He stated that this 2-hour period is spent either in the career training area or in job development workshops. The students are earning credits toward

graduation although no formal classes or lectures are held, he added.

"In addition to teaching the students skills necessary for careers, the job development workshops enhance the students' ability to apply for a job in the community. Interviews with students conducted by Northrop employees are videotaped and critiqued by professionals," he said.

A program similar to that of Northrop is offered by Security Pacific National Bank, Los Angeles, California. According to Mr. Everett McDonough, Jr., the bank's Vice President of Public Affairs, 60 students per semester are able to spend afternoons in the various branches of Security Pacific, learning skills which might enable them to work in banks. Such skills include typing, filing, and money-changing, he said.

Los Angeles also offers a shadow program whereby once a month, for a full year, junior high school students spend an entire day in a job situation, carrying out employee duties.

Session 242
Experience-Based Career Education

New York Offers Career Decision-Making Projects for Students

New York is presently involved in a series of career decision-making programs which provide students with the opportunity to choose a career and then make it a reality.

Ms. Clara Blackman, Assistant Director of the New York City Board of Education's Bureau of Educational and Vocational Guidance, and Mr. Burton Goodman, Coordinator of the High School-College Continuum Program, Board of Education, New York City, described an articulation project from secondary to post-secondary school. They said that Project High School-College Continuum is a pilot program funded by the Vocational Education Act through the Center for Career and Occupational Education. The program is aimed at providing intensive guidance in career development to eleventh and twelfth grade students at three selected high schools through the sharing of high school and community college facilities.

The program permits students to select a career of interest and then provides firsthand knowledge of the occupation to students through on-site experiences.

The students operate equipment, become familiar with technologies, and question prospective employers about job opportunities, chances for advancement, and the outlook for the future.

Mr. Norman Shapiro, Principal, George Westinghouse High School, Brooklyn, New York, discussed a program for identification of minorities in science and engineering called the Comprehensive Math and Science Program.

This program utilizes the institutional resources of college and industry to enhance instructional and career counseling activities in urban secondary schools with large minority student enrollment.

The project began with the admission of 18 participating students, selected from the 56 students of the 1974-75 program, into the engineering school at the University of Massachusetts.

These students spend six hours a week in a comprehensive program including industrial and college site visits.

"Once they had low aspiration levels and a poor self-image with no hopes for a successful future," Mr. Shapiro said, "but after the program, all 18 students passed every course. Three students entered the University of Massachusetts and the other 15 entered a 2-year college. All students were pleased with the results and had no regrets," he added.

Mr. George M. Shirky, Principal of the Manhattan Vocational-Technical High School, New York City, described his school's program of career guidance.

Career education on the ninth grade level provides an exploratory experience in four subject areas: mechanical, structural, electrical, and building construction.

The tenth grade level provides in-depth exploration and training in one occupational area. On the eleventh and twelfth grade levels, intensive preparation is provided in selected occupational areas leading to job entry, further education, or both.

Mr. Cecil Benjamin, Principal, Samuel Gompers High School, Bronx, New York, spoke of a pre-engineering program he initiated for the Southeast Bronx which he called a "largely deprived" area. This program, offered at the Bronx Community College, involves one of four options after graduation: world of work, 2-year community college, 4-year college (namely, the University of Massachusetts), or enrollment in the military services for additional training.

Concluding the session was Mr. Gil Lopez, Project Director, Comprehensive Math and Science Program, University of Massachusetts, Amherst, Massachusetts. Mr. Lopez's program, funded by the National Science Foundation, works to improve math skills of minority students by individualized instruction and to motivate them to consider engineering as a career. In the eight participating high schools the program has been successful, he said.

Session 244
Career Decision-Making Programs

Illinois Businesses Host Teacher Workshops

"The best way to reach the children in school is through the teachers," said Mr. Roger Gielow, Attorney for J.L. Wroan Construction Company, Bloomington, Illinois, "This is the main purpose of the Teachers' Workshops on Business Enterprise in Society."

The workshops cover such business functions as retailing, financing, and development, Mr. Gielow said. They are open to all teachers in McClain County, Illinois. The Illinois State University offers graduate credit for participating teachers. An average of 35 teachers take part each semester.

The workshop consists of ten 2-hour sessions held at a different local business location every Wednesday night, following an introductory session held at the Association of Commerce and Industry. Each business has control over the content of its presentation even though the general subject is predetermined.

The Sears and Roebuck Company gives the presentation on retailing which Mr. Gielow said is the most popular session. The National Auto Parts Association covers the session on manufacturing and State Farm Insurance handles the one on personnel. Other businesses involved are the telephone company, local banks, Firestone, and the Illinois Agricultural Association, Mr. Gielow said.

The sessions do not include the basic economic concept of supply and demand because the overused textbook approach "wipes out" interest, he said. Creation of jobs is covered in the general framework along with profit and capital expansion.

A test given to the teachers before and after the workshop shows a definite change in attitude toward business and industry. One sample test question is: How much average profit after taxes do you feel manufacturers make?

"We hope that the teachers will apply this information in classroom situations. Our drawback is not being able to supply enough aids for them to use," Mr. Gielow said. "Our long-range goal is to be able to supply films and handouts."

Mr. Gielow said that another area which needs attention is allowing time to discuss career potential and necessary skills for each session subject.

"A 2-hour session usually only allows the last ten minutes for this type of discussion. We are trying to correct this," he noted.

Session 247
Economic Education and Career Education

Hansen Discusses Twelve Basic Concepts of Career Education

Commissioned by the National Advisory Council for Career Education to write about the basic concepts of career education, Dr. L. Sunny Hansen, Professor and Program Coordinator, University of Minnesota, Minneapolis, Minnesota, spent four months in research and preparation of a paper which she presented to the council in late 1976. (At the time of this writing, the paper had not yet been presented. Dr. Hansen pointed out the views she presented were her own and not the official council position.)

Extensive research backs up Dr. Hansen's definition of the basic concepts of career education. Noting that her sources of information to develop the concepts were numerous and varied, she said that she examined State plans and Federal documents, consulted non-Federal conceptualizers and representatives of private agencies and professional associations, and conferred with Chief State School Officers and with critics of career education.

From a variety of definitions of career education, Dr. Hansen developed a set of 12 basic concepts which she feels must be adhered to if the infusion of career education into the educational system is to be successful.

1. Career education takes into account the changing nature of both individual and environment.
2. Career education. . .integrates into its basic aim the twin goals of development and experience.
3. Career education. . .builds on a solid rationale and conceptual framework of the best knowledge available.
4. Career education identifies a sequential K-adult set of objectives. . .for exposing individuals. . . to a wide spectrum of career knowledge.
5. Career education provides for a wide range of two-way community involvement, both paid and unpaid.
6. Career education recognizes the need for individuals to know a great deal about the occupational and educational world.
7. Career education recognizes the central place of counseling and guidance as part of its delivery system.
8. Career education recognizes. . .the need for individuals to examine and prepare for work roles in relation to other life roles.
9. Career education reaffirms the importance of helping individuals in transition from school to work, school to further education, and school to other alternatives.
10. Career education. . .stresses the importance of attending to needs of bypassed and underserved populations.
11. Career education is. . .not only a response to the crisis in education, but a comprehensive, unifying concept of human development.
12. Career education is a time-oriented concept which. . .can help individuals not only prepare for the future but see the relationships of the future to the past and the present.

To help ensure the successful infusion of career education into the educational system, Dr. Hansen advised

educators to listen to the critics.

"Their concerns should be considered seriously, since avoidance of some of the pitfalls they point out will help to gain support for the career education concept," she said.

Dr. Hansen commented that some of the criticisms of career education come about because of misunderstanding of its definition and noted that there is an "enormous amount" of confusion between career education and vocational education. She also stated that some educators fear that liberal arts will be deemphasized as a result of the push for career education.

"There is also the very real concern that teachers have not been properly prepared to incorporate career education into the curriculum," she added.

Dr. Hansen mentioned that other critics feel that its proponents are expecting too much of career education –i.e., that it will solve all of the social-economic problems of the nation. She added that some people are also concerned that too much emphasis will be placed on the traditional work ethic and they also worry that minority groups, underprivileged, and disadvantaged people will be trapped into low-paying and/or self-demeaning jobs.

Dr. Hansen noted the difficulty of making changes in the educational system, but said she hopes to see career education become "more than a fad of the 1970's." She said that those in powerful positions must clear away the confusion and must convince others that career education is a viable concept.

Session 249
Basic Concepts of Career Education

Panel Discusses Evaluation of Career Education Programs

From left, Dr. Elvis H. Arterbury, Project Director, Partners in Career Education, Arlington, Texas; Dr. Sidney High, Director of Career Education Programs, Office of Career Education, U.S. Office of Education, DHEW, Washington, D.C.; and Dr. Lois-ellin Datta, Assistant Director, Education and Work Group, National Institute of Education, DHEW, Washington, D.C.

In a session entitled Career Education: What Proof Do We Have That It Works?, Dr. Lois-ellin Datta, Assistant Director of the Education and Work Group at the National Institute of Education, Washington, D.C., stated that there is beginning to be some evidence that career education is working.

She outlined the following aspects of evaluation as important to keep in mind:

1. **The commitment to evaluation and assessment.** She cited as evidence of this commitment the over 300 evaluation and assessment reports on career education which are available through such organizations as ERIC; the number of sessions in conferences which deal with evaluation; public statements from the labor, industry, business, and education fields on the importance of evaluation; and the expressed need of educators around the country for evaluation studies. She also added that educators desire to obtain evaluation data because accountability for programs is a way of life; because critics needle on the importance of evaluation; and because those involved in career education want to avoid the "expectation drift" while having great concern for improving the quality of career education.
2. **The importance of high ideals for career education, but with realistic expectations.** Dr. Datta noted that there are both extrinsic and intrinsic reasons for keeping expectations for successful evaluation within limits. In the extrinsic category are the difficulty of measuring outcomes (although such studies as the National Assessment of Educational Progress are now being used to help in this area), the shortage of monies available for career education outcomes measurement, and the fact that because start-up is often difficult for programs, resources are not always available for necessary evaluation. According to Dr. Datta, the intrinsic reasons bearing on the evaluation of career education programs are (1) the fact that because career education is developmental and the effects cumulative, it is necessary to have longitudinal studies which measure over time; (2) the fact that it takes some time to get a career education program underway, and that testing must be done after this is accomplished; and (3) the diversity of the recipients of career education. (Because career education helps older women, high school students, 7-year-old children, etc., the answers to questions are harder to come by, Dr. Datta stated.)

Dr. Datta closed this introductory portion of the session by saying that the presenters would not give a description of the workability of programs, but would look at some outcomes. She also stated that no attempt would be made to refute critics, but that some well implemented programs would be looked at—two on the local level, two on the State level, and a final review from the Federal level. Dr. Datta said that the data would show that while career education is off the ground, it cannot yet be expected to soar.

The first presentation was made by Dr. Phillip Spieth, Supervisor of Evaluation Studies, Dade County Public Schools, Miami, Florida. He stated that the Dade County schools have had career education for grades K through 12 for the past three years; during the last two years, a comparative evaluation has been done, using a particular group of students and following through on a longitudinal basis.

Dr. Spieth explained that the studies being done in his area were an attempt to acquire some data on the percentages of people who felt that the career education program had trained and prepared them well for chosen careers. He added that as the program expands, data will be harder to get; thus an attempt was being made to find some corollaries that could be measured. One of these, he said, was in the attitudinal area, where it might be possible to measure improvement in students' attitudes toward school in relation to the increased relevance provided in career education programs. Dr. Spieth noted, however, that it was hard to achieve a measurement such as this, as there is no available instrument, and attitude is not always related to inputs, making it difficult to get immediate evidence.

Dr. Spieth said that another possible corollary was in the area of achievement; if the program has increased relevance for the students, achievement levels will be higher.

A third area for measurement mentioned by Dr. Spieth was knowledge of occupations, or the ability of students to identify and get the jobs they might want. In this area, Dr. Spieth said, three categories of data were being studied:

1. At the elementary level, students in the career education program showed immediate gains above the national normal level in career awareness. At the junior high level, however, after 6 months no increase was shown; therefore, a second measurement was taken in the second year of the program, and at this time some gain was shown, providing data to indicate that the trend was toward increased awareness.
2. On a person-to-person basis, a student in the career education special language arts program was matched with a student who was not in the program. At the end of the ninth grade, it was found that the group of career education students met a higher percentage of the objectives in the test than did the non-career education group, again indicating a trend toward higher achievement.
3. A group of subject matter tests was given to determine what students knew about jobs, what skills were needed for specific jobs, how to get jobs, etc. In these areas, Dr. Spieth concluded, it was shown that the career education program had a strong impact.

The next speaker was Dr. Frank Rapley, Assistant Superintendent for Research and Evaluation, Jefferson County Public Schools, Louisville, Kentucky. He began by stating that the career education program in his county was for grades K-12, and had been implemented in one elementary, one middle, and one high school, for students from low-income families.

Dr. Rapley said that staff members planned the program around the identified needs of the students. It was determined that children in this district had a severe lack of basic skills, with students falling 2½ years below grade level by grade 8; that students displayed a lack of information on jobs and the world of work; that only about one-third of the students planned to finish school; and that students showed wide acceptance of sex stereotypes and roles. The objectives were established in six categories: knowledge of occupations and job clusters, career concepts, decision-making, self-awareness, basic skills, and work habits.

In a brief status report on the first year of the program, Dr. Rapley pointed out that operational criteria had been defined by saying that a specified number of students would reach a specific percentage of the objectives in each area. In the area of knowledge of occupations and job clusters, the criterion was met in grades 1-6 and 9-12. Grades 8 and 9 did not meet the criterion in all of the objectives in this group, but did exceed it in others. The criterion in the area of career concepts was reached by grades K-2 and 10 and 11, was not reached by grades 3-6, and was reached on parts of the objectives by grades 7 and 8. In the areas of decision-making and self-awareness, the criterion was met on all grade levels. In addition, Dr. Rapley said, some comparative data available for grade 8 showed that students in the career education program had an increased sense of their choices and job-holding futures.

In the objectives area of basic skills, the data were merged, but children were shown to be still below grade level, Dr. Rapley said, adding that more data were needed in this area. The category of work habits and relevance of school was evaluated as having provided positive answers for students in relating education to meaningful preparation for a career.

Dr. Rapley ended his presentation by pointing out that a desegregation program which was implemented concurrently with the career education program made it impossible to do some of the necessary comparisons for evaluation. He stated that it was important to implement process evaluation in order to document what was really going on in the program.

Dr. Richard Ruff, Evaluation Specialist in Career Education, Arizona State Department of Education, Phoenix, Arizona, was the next speaker.

Noting that career education had been a part of the Arizona educational program since 1971, and that a great deal of data was available there, Dr. Ruff stated that the primary career education objective in Arizona is to provide knowledge and skills to plan and prepare

for a career, and that if this is accomplished, career education is a success.

"In the last 4 years," Dr. Ruff stated, "over 25,000 students in grades 3-12 from both rural and urban areas have been tested. One group had a high exposure to career education, while the control group had limited exposure."

The first finding obtained through the testing was that students with high exposure to career education achieved significantly greater knowledge of occupational choices and the world of work. The second finding showed that career education helped students develop higher educational awareness, including the educational requirements for various careers. A third finding showed that career education helped students develop a better understanding of specific skills and abilities as they relate to varied fields of work. The fourth finding mentioned by Dr. Ruff indicated that career education helped to increase students' understanding of the economic rewards of different jobs and the lifestyle differences through varied occupations.

"The data, in summary, indicate a broader based knowledge of, and better preparation for entry into, the various occupational fields," he said. "This is not sufficient, however; students also need confidence that education and occupations can be achieved."

He said that the data also indicated that career education had a significant effect on students' self-confidence in regard to their future.

The following reasons for career education's current level of success in Arizona were outlined by Dr. Ruff:

1. The State legislature has been highly supportive and has provided monies for career education since 1971.
2. Career education in Arizona has had great support from business, industry, and labor. Over 160,000 students have been given tours of businesses.
3. The State Department of Education has made career education one of its three highest priorities.
4. The program has been systematically implemented since 1971, as it was felt that a long-range commitment was necessary to achieve results.
5. There has been a philosophy toward evaluation which included a two-fold purpose for data—to measure the effectiveness of career education and to determine what might be improved in the program.
6. The local staff and educators who have implemented career education have been a talented and enthusiastic group of people.

The next speaker was Dr. Elvis Arterbury, Project Director, Partners in Career Education, Arlington, Texas. He stated that to prove if career education worked, it was necessary to develop a test system which would determine whether career education can develop learner outcomes in students. In career education, he went on, an attempt was being made to eliminate student alienation and make curriculum more relevant. His organization had designed a study using fifth grade students, with 225 in the experimental group (with career education) and 125 in the control group. In comparing the basic skills of the two groups, it was found that the experimental group showed gains in reading expression but not in reading comprehension, in mechanics and expression in writing, and in study skills.

Dr. Arterbury said that no math was included in this original test, but stated that the following year, math was included and the experimental group was not comparable. Learner outcomes were then infused into the math curriculum and later tests showed a gain. He ended his discussion by stating that although career education cannot be viewed as a means for solving all problems in basic skills, it can play an important role. In closing, he related that his group had recently obtained funding to infuse career education and do the first inner city testing in Dallas.

The final member of the panel to speak to the group was Dr. Sidney High, Director of Career Education Programs, Office of Career Education, United States Office of Education, U.S. Department of Health, Education, and Welfare, Washington, D.C. He stated that he would present a brief review of some evaluation efforts around the country in relation to the question of whether career education works in terms of the goals proposed for the movement. The program, said Dr. High, is just getting well underway, and cannot therefore be expected to "soar."

Dr. High referred to some perspectives on the problems of evaluation in regard to selected goals proposed for career education. Noting that Goal 1 states that career education programs will have a favorable impact on students' basic skills, he cited a study by Dr. Lee Olsen in Lincoln County, West Virginia which indicates that an experimental group of students in the career education program showed higher levels in basic skills areas such as language arts and math than did those in the control group. Another study conducted by the Board of Education in Newark, New Jersey found that of 237 children in grades 2-6, only those in grades 3 and 6 failed to show a significantly higher achievement level in math when career education was in place.

Goal 3 states that career education should have an impact on the work values of students. Dr. High referred to a study from the State of Vermont which indicated through pre- and post-tests a significant increase in work values through career education.

Goal 4 states that career education will improve career decision-making, job-seeking, and job-finding. In Arizona, findings show that students with high career education exposure display higher awareness in decision-making. In Pontiac, Michigan, a test using an experimental and a control group found that those students with training in job-seeking skills had an 8-to-2 advantage in being hired over those in the control group. (This was done by having an impartial corporate representative interview the students and decide which ones to hire.)

The next goal which Dr. High referred to was Goal 6, which states that students in career education will be equipped with a degree of self-understanding and

career understanding. In this area, Dr. High again cited the studies done in Newark, New Jersey, stating that during the course of one school year, 1975-76, 314 students in career education showed significant increases in career awareness. Dr. High also mentioned a small school district in New York State which tested with a control group. In the areas of self-concepts, self-knowledge, and values, the career education students scored higher than did those in the control group. In Santa Barbara, California, 50 students at each grade level from 7 through 12 were tested, with a pre-test in the fall of 1972 and post-test in the spring of 1973. The effects of the program were shown to be positive at all of the grade levels, for both sexes. The West Virginia study done by Dr. Lee Olsen and studies in Mississippi and Bismarck, North Dakota also pointed to the fact that career education programs had been effective in increasing both self-awareness and job awareness.

The last goal discussed by Dr. High was Goal 10, which says that career education will increase students' perception of their ability to control their own destinies. According to Dr. High, the Newark Board of Education study had produced some evidence that the career education students had progressed in this area. Dr. High concluded by saying that in these five of the ten goals formulated for career education, it was possible to pull together from States around the country some proof that career education can and does work.

Dr. Datta adjourned the meeting after announcing that the follow-up session would include recaps of the presentations and questions to each of the panel members. Highlights of the follow-up session are found below.

In recapping his presentation, Dr. Ruff noted that needs assessments were done in Arizona with parents, students, teachers, and businesses, and that follow-up studies were done of graduating seniors. He also stated that all curriculum development and instructional materials were tested.

During the recapitulation of his presentation, Dr. Sidney High again reviewed the studies which provide some evidence that career education is effective. He stated that it is, however, hard to find proof in many cases, and that there were projects which were perhaps more successful than others, but which had no proof. In some cases, he said, only a post-test was done; in others, no control groups were used, thus the evidence was unusable. He said that a parallel evaluation was needed in order to obtain evidence to show that career education is working, and added that he was pleased that the large number of people in attendance seemed to indicate that there was a feeling that career education does work and that ways must be found to prove it.

Dr. Datta closed the session by stating that she believed there had been a strong commitment made to evaluation and assessment of career education, and that she was impressed by the remarkable thoroughness of the approach to implementation. She added that although there is a great deal of evidence about some outcomes of career education, she would like to see some proof that the program expands awareness of nontraditional occupations for men and for women. In conclusion, she challenged evaluators to continue to improve their work in order to determine if career education works as fully and as effectively as hoped for.

Session 301
Career Education: What Proof Do We Have That It Works?

From left, Dr. Richard Ruff, Evaluation Specialist, Arizona State Department of Education, Phoenix, Arizona, and Dr. Frank Rapley, Assistant Superintendent for Research and Evaluation, Jefferson County Public Schools, Louisville, Kentucky.

Organized Labor Looks at Career Education

Mr. Walter Davis, Education Director, AFL-CIO, Washington, D.C., makes a point in a session entitled Organized Labor Looks at Career Education.

Mr. Walter Davis, Director of Education, AFL-CIO, Washington, D.C., chaired a panel discussion entitled Organized Labor Looks at Career Education.

Noting that the four panel members represented 4 million workers and 16 million families, Mr. Davis said, "Labor is the American worker and his kids and therefore has a great stake in what goes on in public education. . . .Labor must be a partner in the whole system or it will not work."

Mr. George Butsika, Director of Education, United Steelworkers of America, Pittsburgh, Pennsylvania, noted that, traditionally, labor has played a significant role in the development of education. He commented that labor has been instrumental in affecting educational policies, e.g., State colleges and legislation concerning educational systems.

"Education is the foundation of a free democracy without which there would be no labor movement," he said.

Mr. Butsika posed the question of exactly what is meant by a career. One example that is often brought up is the field trip so that the child can be exposed to the occupation and see how the labor movement has contributed to this job.

"I am not certain that career education can accomplish everything its proponents propose, such as better production and more satisfied workers," he said. "I would rather see the issue of 'careers' handled in a practical sense—i.e., by making it possible for students to get the jobs."

Mr. Butsika related that jobs often "go begging" in the steel industry because of a lack of applicants' training in the fundamentals.

"What we need to do is to take a hard look at the educational process as it stands today. We need a return to the basics and only then will we be doing a great deal for the students. Since the environment is changing rapidly, we can't afford to have teachers instructing only about available jobs because of rapid obsolescence associated with technology today," he said.

He continued, "My concern is taking the student out of the classroom and putting him in a workplace. Although the company is getting free labor, is the child getting the academic education that he really needs? How can you solve problems of productivity and absenteeism when you take the child from school to show him the workplace?"

Mr. Butsika also said that he is opposed to volunteerism when it means that a volunteer, such as a voluntary librarian, is not a specialist in serving the needs of school children.

He concluded his remarks by saying he hoped that the need for career education would not be an excuse for other problems when children are not getting the basics in school.

Mr. Reese Hammond, Director of Education, International Union of Operating Engineers, AFL-CIO, Washington, D.C., spoke next.

He said that he wished to restate and reaffirm some of education's basic premises as follows:

1. Education is power, and in a democratic society, power should be shared.

2. The purposes of education are work, life, and public service. It is essential to relate career education in society to service and development.

3. The fundamental skills for employment are reading, writing, and reasoning. These have been the goals of the American trade union movement since its infancy.

4. The lowest common denominator measure of success for an educational system is one that maintains, but does not foreclose; challenges, but does not restrict; and responds to, but does not condemn, late achievers.

Next, Mr. Carroll M. Hutton, Director, United Auto Workers' Education Department, Detroit, Michigan, told participants about UAW career education activities.

Mr. Hutton commented that in January 1976 the UAW issued its first public policy statement supporting career education. He noted that this was a byproduct of participation in the career education movement, mainly in Michigan.

Mr. Hutton stated that the educational philosophy of the union was completely compatible with career education because of the "sharp focus on effects of insufficient or misdirected education experienced by our society."

"The broad scope of UAW activities has moved labor far afield in educational matters, as well as community interests. We have been concerned with effectiveness, creativity, relevance, and viability. The last two characteristics should be the goals of career education," he said.

Commenting that students must be offered realistic options, Mr. Hutton remarked that the UAW's 1976 career education statement responds to career education in a viable, relevant manner. The highlights of this statement are:

1. The UAW will respond to the call for educational reform.
2. Students should be educated to perform effectively and contribute constructively to society.
3. Career education, if properly implemented, can address many problems in today's educational system.
4. Career education must also prepare the individual for cultural and leisure activities.
5. Career education is meaningful only if there are jobs for everyone. Full employment is a need and goal for the country.
6. The UAW endorses a philosophy that career education is expected to create a citizen who is self-confident, culturally advanced, and is able to manage the tools of his/her occupation.

"From the beginning, the unions have demonstrated the belief that democracy has depended on education through strong staff training departments, labor studies programs, educational leaves, and tuition refund plans (through collective bargaining)," he said. "The UAW feels that we are sensitive regarding the strengths and weaknesses of the public education system through experiences such as being the contractor for Federal and CETA manpower programs."

Mr. Hutton said he believes that viable alternatives can be developed in support of career education without affecting child labor and minimum wage laws. He averred that organized labor will not support the adoption of changes in these two laws.

"Public education should help youngsters develop decision-making skills and adaptability as well as show them how to learn," he said.

Mr. Hutton concluded by stating that, if career education is to be effective, it must (1) offer students an opportunity to learn employment skills in a changing environment; and (2) instill in students a desire for academic knowledge and learning throughout their lives.

Ms. Eugenia Kemble, Special Assistant to the President, American Federation of Teachers, AFL-CIO, Washington, D.C., stressed that education is preparing students for democracy. She referred to the "best" education as "education for life" and noted that any educational reform movement must involve the basics.

"Education should not be cut to provide for career education," she said, "and we must not substitute process concerns for the basics for decision-making."

She contended that career education fails to address certain specific points such as the problem of additional personnel, minimum wage laws, expanded guidance and counseling services, adult education, school dropout rate, lack of education funds, the briefer school day, lack of in-service training, etc.

"To date, labor has been left out in the cold," she said, "however, we hope. . .anticipate. . .that there will be an expanded role for labor in career education. We need to expand guidance and counseling services; internship, paraprofessional, and apprenticeship programs; and adult education through worker sabbaticals and paid educational leave. We also need to take a new look at creating possibilities for adults who have not finished high school," she concluded.

Mr. Davis closed the first half of this session by stressing the importance of a partnership between schools, labor, and the entire community.

During the second half of this session, Mr. Barrett Seeley, a representative from the AFL-CIO's Department of Education, chaired the discussion. The panelists repeated their presentations and then answered questions from the audience.

Session 302
Organized Labor Looks at Career Education

From left, Mr. George Butsika, Director of Education, United Steelworkers of America, Pittsburgh, Pennsylvania; Mr. Carroll Hutton, Education Director, United Automobile Workers, Detroit, Michigan; Ms. Eugenia Kemble, Special Assistant to the President, American Federation of Teachers, AFL-CIO, Washington, D.C.; and Mr. Reese Hammond, Director of Education, International Union of Operating Engineers, Washington, D.C.

Major Industries View Career Education as Means to Their Ends

It is clear that "Big Business" views the career education concept as a highly potent tool for developing a skilled work force. It is becoming increasingly obvious that many pressures, worker dissatisfaction, spiraling costs, inadequately prepared entry-level workers, and substantial nudging by the Federal government are forcing business to look for new ways to alleviate these growing problems. Business people have grasped the career education concept as a way to shift part of the onus of preparation onto the educational community. They are quite willing to help carry part of the burden, and, in fact, have been making substantial efforts to seek solutions on their own. Representatives of the upper echelons of Fortune 500—General Motors, General Electric, American Telephone and Telegraph—plus Brown and Root Construction carefully explained the position of Big Business toward education and the world of work, in a session entitled Career Education Efforts of Major Industries.

All see career education as a means of helping to supply highly motivated, skilled, and directed workers for the jobs of the future. These corporations epitomize the stake that business has in effective education—education aimed at filling industry's needs. The "Big Three" (AT&T, GE, and GM) have spent mega-dollars in the planning, development, and implementation of teacher, guidance counselor, and student-oriented programs to bring increased knowledge and awareness of the potential of America's industrial prowess. Brown and Root has remained somewhat more modest, and concentrates on education programs for on-board employees.

All four organizations are heavily committed to their version of the career education concept and welcome the opportunity to expand promulgation of their viewpoints into the world of education. To do this, they are ready, willing, and able to supply trained personnel, physical facilities, programs, and curricula to the educational community and the general public.

Mr. Willard D. Cheek, Manager of Educational and Public Relations, spoke about how GM currently supplements academic learning, through the GM Training Centers and Plant Committees. Through career education, GM hopes to help determine career education implementation goals in the school system, thus reducing GM's retraining or "education" costs.

Mr. Richard W. Arnold, Manager of AT&T Educational Relations, said that he thought AT&T's efforts in career education were mainly altruistic.

"We want to be a good corporate citizen," he said.

He cited consent decrees for affirmative action, signed by AT&T; turnover costs; and lack of economic literacy as reasons for supporting the career education concept, in addition to the fact that it is good business management.

Mr. Joseph Bertotti, GE's Manager of Corporate Educational Relations, saw career education as a partial answer to increasing job dissatisfaction and high unemployment. He expressed GE's growing concern about minority uninvolvement in technology. To remedy this situation, GE has produced EXPOTECH, a traveling exhibit, to encourage minority and other students to enroll in mathematics, science, and engineering.

Brown and Root's Vice President, Mr. Edward Redding, said that B&R has been involved in career education and didn't know it. He cited 20,000 B&R employees, "sent through our own education program," as evidence of career education efforts in the construction industry.

Business has made significant overtures toward educational groups.

GM has good relationships with vocational, technical, academic, and guidance people in the school system, according to Mr. Cheek.

AT&T has 200 people working full-time with educators. Last year 10,000 Bell System people helped classroom teachers and, through them, reached 30 million students, said Mr. Arnold.

Mr. Bertotti extolled GE's close association with the American Personnel and Guidance Association (APGA), the American Vocational Association (AVA), and other education groups. Mr. Redding's company is not yet affiliated with organized education, but he said that its internal education programs are spreading to other construction companies.

Representatives of the "Big Three" detailed specific techniques to bring their world of work to the classroom.

GM will provide speakers, visit classrooms, design curricula, and provide orientation and materials. Within school planning districts, GM helps define career education implementation strategies.

AT&T will rechannel some of the $15 million spent on in-house remedial education, in support of the career education concept.

GE will help develop systems of improved guidance and counseling at the elementary, secondary, and college levels to give youth better decision-making skills. Staff are integrating community resources through advisory committees and task forces. They wish to achieve credibility by working with accredited education agencies. They will work to stimulate interest through student-oriented publications, and provide job-oriented booklets dealing with the world of work. GE uses the shadow concept during in-plant visits.

The thrust of major industry vis-a-vis career education was summarized by Mr. Bertotti of GE, "We have developed a great handful of strategies in career education in the past four to five years; it is time now to move forward in implementation."

Session 303
Career Education Efforts of Major Industries

Participants Explore a Work 'Venture' for the Undergraduate

Based on the premise that there are a number of "restless students" who have grown disillusioned and uncertain about what colleges hold for their futures, the college Venture program (housed at Northeastern University) has been established in 12 northeastern liberal arts colleges and universities to offer a work experience to the undergraduate. Behind the program is the idea that there is a real need for today's liberal arts students to be more prepared for the work world. The positive aspect of the "liberal" education takes second place to the real problem of employability many students face upon graduation.

The main purpose of Venture is to place undergraduates on academic leave for a semester or longer in an off-campus job.

Dr. Paul Dube, Professor of Cooperative Education and Director, Center for Cooperative Education, Northeastern University, Boston, Massachusetts, addressed the reasons many students are "stopping out"of college.

"They need to take a closer look at where college is taking them. They are having difficulty finding meaningful careers, and they are feeling isolated and enclosed in universities. They seem to be uncertain of their college purposes, unclear about their future careers, and unconvinced of some of the best academic programs in the country," he said.

According to Dr. Dube, Venture is designed to place undergraduates in study-related or career exploratory, off-campus jobs as early as possible. The Venture staff meets with students to help them focus more clearly on tentative career choices, and to identify objectives for the off-campus work experience.

The Venture representative monitors the experience and helps the student and the employer evaluate his/her performance. The college determines whether or not the student is granted academic credit.

Dr. Charles Shain, Director, Institute for Campus Experience and Cooperative Education, Northeastern University, spoke about the outcomes of the program. According to Dr. Shain, students have become clearer on what they want from college; jobs have made the students feel more useful; and some have set new goals, while some have had their original goals reinforced. Dr. Shain noted that all the students recognized the difficulty of learning work habits and values in the classroom, felt schools did not help their maturity, and discovered the necessity of remaining flexible in a changing environment.

Dr. Shain also spoke about the problems with the academically oriented classroom, and the need for instructors to take a more active role with student career guidance.

"Faculty has now become more aware that career education should not take a back seat to traditional education," he said.

At a faculty conference, some specific suggestions were proposed to alleviate these problems. The faculty feel they can be more helpful by being more knowledgeable of the work world, by talking to graduate and work experience students, by taking academic leave for direct off-campus work experience, by participating in student counseling, and by providing more flexibility in college curricula.

As for the future, in the coming year, Venture will expand into new areas of study-related jobs. Career counseling will be more widely used so the students can focus, as early as possible, on their career choices. Faculty will be drawn into helping and advising the students more with their career choices.

Venture will also be using community resources. Employers will be brought to the campuses to inform the students and faculty about their requirements.

"This will give the student a much better opportunity at employability, which is one of the primary goals for the undergraduate," Dr. Shain noted.

Session 304
College Venture Program: A 12-College Career Education Effort

Ms. Mary T. Soper, Social Worker, Women's Center, Northern Michigan University, Fenton, Michigan, in a session on Career Education: Women in the World of Work.

Mr. Larry Bell, Teacher, and Member of the Central Labor Council, Scottsdale, Arizona, in a session on Labor Unions in Career Education.

Military Active in Career-Oriented Programs

Young people are being prepared for the civilian job market with training they receive in the technical skills needed by the Air Force, said Major Robert Russin, United States Air Force.

According to Major Russin, Air Force recruits receive sophisticated training on complicated equipment in such fields as applied aerospace science, health care, and applied cryptological science. They also receive college and trade school credit for this training, he said.

He noted that such advanced teaching methods as computer-managed instruction, simulators, and learning centers are used.

"The Air Force provides training in a wide range of topics, in about 40 career areas, oriented toward civil partnership," Major Russin said. "When people trained by the Air Force leave it, they can be easily absorbed by the civilian labor force."

Major Stone, United States Army, said, "The mission of the Army is defense of our country. We do not train people for the civilian occupational market."

He added, however, that the Army does use the civilian educational system as part of its training program and sends some of its officers and personnel to civilian educational institutions.

Major Stone noted that many of the enlisted personnel, with a high school diploma or less, are sent to trade schools to learn one of 433 trades considered as military occupational specialties.

"Of these, 376 are directly related to some civilian occupational endeavor," Major Stone said. "Only 57 are related to direct combat and not used in the civilian labor force."

The Army Job Recognition Task Force is designed to document and verify for prospective civilian employers what an individual does while in the service, according to Major Stone. The Army also has 24 apprenticeship programs registered with the U.S. Department of Labor.

The United States Coast Guard is the smallest of the five services, according to Lt. William Horan, United States Coast Guard, but it has great responsibilities.

To help maintain efficiency, 19 training schools have been established across the nation to train personnel, Lt. Horan said.

"There are also advanced training schools for someone already knowledgeable in a field who wants to advance," he added.

The Navy is characterized by diversity, according to Commander John Davis, United States Navy.

"We train about 700,000 students a year in courses ranging in length from two days to weeks," he said. "There are 65,000 students taught a day in courses of over two weeks' duration. The courses they take range from training in jet mechanics to electronics."

Lt. Col. J.M. Keenan, United States Marine Corps, said that there are 20,000 Marines involved in high school equivalency programs.

"When civilians think of Marines, they think of someone charging over a hill," he said. "We are trying to change this. In addition to the high school equivalency program, we run one of the largest remedial reading programs in the country. We think the outlook is good for education in the Marine Corps."

Session 305
Career Education in a Military Service Training Setting

Tucson Elementary Students Practice Learning Through Experience

Why would elementary students need to learn about jobs?

Ms. Sharon Kucinski, Guidance Specialist to 70 elementary school teachers and 1,600 students in Tucson, Arizona, claimed the answer lies in the definition of career education.

Elaborating on this, she said, "Career education gives kindergarten through sixth grade children a chance for gaining skills in the ability to get along with peers, make decisions, solve problems, and relate positively to the world in general."

According to Ms. Kucinski, career education helps instill socialization skills and career awareness. She said that socialization skills are usually integrated into activities that stress the point of working together. This includes self-awareness, decision-making, problem-solving, responsibility, respect, and communications. She noted that career awareness is an awareness of the variety of occupations and their educational and technical backgrounds as they relate to the student's day-to-day lessons in school.

Ms. Kucinski stressed that she feels it is very important to help students turn fantasies into reality.

"Teachers should always ask: 'What carryover to the real world is in this lesson'?' and 'What jobs and skills needed to function as a contributing member of society are found in this lesson'?" she said.

She emphasized that counselors, teachers, administrators, and support personnel can help promote career education.

According to Ms. Kucinski, there are 15 helpful resources to teach career education and values to elementary students. These include listings of careers in alphabetical order, bulletin boards, guidance activities, special events, the media, speakers, role playing, learning centers, parents, teacher handbooks, games, field trips, hands-on activities, individual teacher instruction, and seminars and conferences.

"It is most important to remember that students learn what they do. They always remember what they experience," she concluded.

Session 307
The Elementary Social Studies Teacher in Career Education

Hackettstown High Helps Ninth Graders Prepare for Jobs

A ninth grade student, probably 14 or 15 years old, is sitting in a classroom with other students filling out a job application. He is working quickly, trying to finish it. Suddenly, he stops and thinks for a second. Then, he raises his hand.

The teacher calls on him. "What does 'murutul stutus' mean?" he asks.

The teacher looks at him in bewilderment. She has no idea.

"Murutul stutus," the student says again, for clarification.

The teacher thinks for a moment until it dawns on her. "You mean 'marital status'," she says.

"Yeah, that's it," the student replies, smiling.

That story was told by Mr. William Cashill, Administrative Assistant, Hackettstown High School, Hackettstown, New Jersey, during a session he helped present at the convention. It emphasized a problem faced by many students who are old enough, in many States, to go out and get a job. They don't even know how to fill out a job application.

Hackettstown High School has developed a career education program designed to show noncollege-bound ninth grade students how to prepare for entering the job market and what careers are available to them. The program is called Work-Ed.

"The program helps students become aware of the world of work by exposing them to it and giving them the resources to survive in it," according to Ms. Virginia Fraleigh, Work-Ed Project Director.

Work-Ed helps students evaluate their interests and abilities, set goals, and choose high school courses to prepare them for specific careers, Ms. Fraleigh said.

She noted that Work-Ed began with 100 students in September 1974 under the course title Communications and Careers, but it is actually two courses under one title. Funds for the program were provided by the Elementary and Secondary Education Act, Title III-IV-C.

The course is taught daily and lasts for two consecutive periods. In one period basic skills in communications such as filling out a job application are taught. The other period provides the student with information and experience in career clusters.

"We assume every kid will drop out of school," Mr. Cashill said. "We ask ourselves, 'What will they need to know to get a job'?"

He mentioned that the communications course is comprised of four parts, one of which is conducted during each quarter of the year. Each part emphasizes one area of communication: human values, reading, oral skills, and general writing and practical communications skills.

The careers course gives the student a chance at hands-on experience in eight different career clusters, each lasting 22 school days. Some of the clusters are agriculture, home economics, business, and graphic arts. The students go on field trips, visit technical schools, view films, and hear guest speakers from all career clusters.

Mr. Cashill said that the program works well for them and they hope to help other schools get started with Work-Ed.

"There is money available to school districts through Title IV and Title VII of the Elementary and Secondary Education Act," he said. "You can get money for training, but not for materials."

Session 309
Career Education Practices: Middle/Junior High School

Carr Seeks Military-Education Unity to Train Forces

"The U.S. military is the largest buyer and consumer of career education," said Mr. Thomas W. Carr, Director of Education for the Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Department of Defense.

In a session entitled The All Volunteer Armed Forces and Career Education, Mr. Carr explained that the military must cooperate with higher education institutions to develop career education programs.

"The military and higher education are squared off for a battle for the 18-year-old," he said, "but there really need not be a battle."

Instead, Mr. Carr proposed a compromise.

"We should get our share of the 18-year-olds and ask higher education to cooperate in educating them," he said.

Mr. Carr maintained that both the military and higher education are desperately in need of the 18-year-old to survive.

"The Department of Defense must recruit one out of every four men entering the job market," he said, "and by 1980 it will be one out of every three."

The higher education institutions have expanded to cover a need that is no longer there, he said.

According to Mr. Carr, only 11.4 percent of undergraduate institutions today can be considered "healthy."

He added that although military training is essentially geared to fighting, in order to attract the 18-year-old it must demonstrate that in the military one can learn a skill useful in civilian life.

"The military has to create the image of pursuing a career on a volunteer basis," he said.

"This is not pure altruism," he continued. "We want to attract the best of the 18-year-olds without battling for them with higher education."

Mr. Carr proposed that the military cooperate with higher education to train its forces.

"Education is a business the military would rather not be in," he contended.

According to Mr. Carr, the military has to have two goals: to train forces to perform for the military

and to better the community.

He suggested an integrated program of service training and off-duty education from which a person would receive academic credit.

"The military also needs a single system to tie it all together," Mr. Carr said. "This program is not an abstraction. All this is already working except the single system, and that is still on the drawing board."

Session 316
The All-Volunteer Armed Forces and Career Education

Elementary Principal Capitalizes on Staff and Community Resources

Mr. Ewell Gunter, Principal of Fairhaven Elementary School in Orange, California, told conference participants about a comprehensive career education program for young people during a session entitled The Elementary School Principal in Career Education.

The first thing he found upon entering his own career as an elementary school administrator was a gap between the "normal" children and those with learning handicaps. This gulf extended to their teachers, who would sit on opposite sides of the room during staff meetings.

As a result of encouraging staff members to talk about some of the things that they had in common and some of the things that the children had in common, Mr. Gunter found out quickly that his teachers and staff members had a number of unused skills which could be important and helpful to kids.

"I also found out that many of our staff people could easily teach remedial skills to all our children," he noted.

In this way, and by bringing in junior high "tutors," he brought the size of some classes down to 11 students.

Four years ago he moved to the Fairhaven School, in Orange, where he presently works, and found already in operation an Office of Education grant to study career education in grades K-6. He had already developed a career education module at Panorama School, on his own, and at Fairhaven he met teachers as eager to expound on new methods as he was.

"With that program, some outstanding materials were developed by teachers. I told them, I'll work on the scheduling and logistics; you just do your best jobs and use your imaginations," he said.

In expanding his program at Fairhaven, Mr. Gunter has used many community and school resources.

"We went to the PTA and asked for wood, or paint, or whatever, and they were extremely cooperative. We were able, for example, to build a darkroom out of a boys' lavatory."

Mr. Gunter advised other educators not to be timid in asking anything from the community. Through volunteer efforts, he has been able to accentuate his career "elective" program.

"Our school nurse teaches a class in medicine, and the students actually do surgery, on chicken wings. We've had both mayors in the communities where our students live come to talk about government, and one of them is now a U.S. Congressman. We've had rocket launchings to teach the principles of aerodynamics. . . .I'm not afraid to allow students to venture out into sports, typing, and art as possible career education alternatives," he said.

However, Mr. Gunter stressed that he never neglects basic library resources. The school has a resource room and a full-time resource librarian so that students can look at career information and take it home with them as they would any library book.

Mr. Gunter said he views career education as a total approach to learning, certainly not replacing traditional education, but reinforcing it, making it relevant and interesting. According to him, it's the "fun part of learning that makes the entry into the world of work look more like an adventure than a nightmare."

Session 320
The Elementary School Principal in Career Education

Mrs. Ann Kelley, Elementary School Principal, Pike County School System, Troy, Alabama, talks about a math module for metrically analyzing career education in elementary schools in a session on The Elementary Math Teacher in Career Education.

Californian Claims Success of Career Education Relates to Extent of School Superintendent's Involvement

The Ceres, California Unified School District's 1975-76 career education project, Career Education Responsive to Every Student, was the culmination of four years of activity in which career education was integrated into curriculum at all levels, from preschool through twelfth grade. The project has involved development of original instructional materials, the infusion of career education into teacher training, and the application of the career education concept to ancillary district services such as guidance and classes for the handicapped.

Dr. M. Robert Adkinson, Ceres School District Superintendent, stressed the importance of involvement and full support of the superintendent in the implementation of career education programs.

"A superintendent is in a position to motivate and provide direction to the district staff, which in turn provides the same for the principals, who provide the same for the teachers," he said. "However, to successfully implement a career education program, the superintendent must be willing to reallocate resources and to allow enough flexibility so that the staff can try new ideas. Support from the community, from the media, from the Board of Trustees, and from the administrative and teaching staffs is a necessity," he added.

According to Dr. Adkinson, career education has had a positive impact on academic achievement in the Ceres Unified School District.

"In terms of both teaching and learning, the school became an important work station in which academics were related to the world of work," he said.

One method used to achieve this on the elementary level is Reality Land, a special simulated community within the classroom. The students are involved in setting up businesses and obtaining the necessary licenses, and forming and managing the postal system and the banks. The community includes a city council, attorneys, judges, and a court system for trials. The students draw on such resource people and entities as the mayor, city council, and the municipal courts.

Infusion at the secondary level was a slow process, according to Dr. Adkinson. Strong leadership, extensive staff in-service, and the development of career education materials appropriate for subject matter courses were necessary to effect change. A special Bicentennial career education program, entitled A Mighty Few, was successfully implemented in the Ceres Unified School District's secondary level. Over 200 students participated, receiving special instruction in career orientation, exploration, and preparation. Part of the instruction took place during a 3-week trip from California to the Washington, D.C. area. The students visited many of the major businesses and industries across the nation during this trip.

Ms. Marilyn Hildebrandt, District Evaluator of Career Education, Ceres, California, focused most of her discussion on staff in-service.

"The primary purpose of staff in-service is to improve the instructional method and increase student learning," she said. "The in-service model adopted by this district is based on such current educational practices as learning theory, behavioral objectives, and product evaluation, as well as the instructional techniques of simulation gaming and values clarification."

Ms. Hildebrandt reiterated that the degree of success reached by a career education program is directly related to the degree of involvement of the superintendent.

Session 321
The Superintendent in Career Education

Arizona Presenters Say Career Education Demands a Managed System

"Why should your school district have a managed system of career education, i.e., a system encompassing all aspects of a school district?"

"The answer is simple—to produce functioning members of society."

That is the goal of Career Education for Tempe Area Students (CETAS), Tempe, Arizona, according to Dr. Robert L. Wilburn, Project Director, CETAS, and Ms. Candice Pope, Career Education Specialist.

Dr. Wilburn maintains that the traditional methods of career education, i.e., the "Santa Claus approach" and the "doctor-patient approach," often fail in their objectives of producing functioning members of society.

He said that this occurs because neither traditional method is a managed system and neither method involves the commitment of the entire district.

Dr. Wilburn condemned the "Santa Claus approach" (one in which career education materials are merely given out to different teachers) because it implies that career education involves nothing more than distributing brochures or showing slides to students.

He described the "doctor-patient approach" as one in which the career educator(s) in the district provides remedies for career education.

Dr. Wilburn said that the problem with this approach is that there is no assurance that the remedies or proposals of the career educator will be followed by the school board, for example. He suggested that the school board might not understand the needs of career education if it is not actively involved in the process.

According to Dr. Wilburn, to solve the problem, an integral ap-

proach is needed. He used an equation to illustrate the point, namely FMS=I + ES MS(CE). This means a Functioning Member of Society equals an Individual plus the Education System with a Managed System of Career Education.

CETAS' managed system of career education is called the Tempe Instructional Management System (TIMS), according to Ms. Pope.

She explained that TIMS' six phases involve all areas of a school district.

Phase 1 consists of the establishment of the school system (district) goals. She noted, for example, that a school board might determine that by the time a student graduates from high school he/she should be able to, according to the TIMS blueprint, "think, calculate, and communicate at a level compatible with his/her needs, interests, and abilities."

Phase 2 concerns program goals. The TIMS blueprint explains, "These goals include grade level, subject area, and career education."

Ms. Pope noted that Phase 3 relates to course goals.

Phase 4 consists of instructional objectives. The TIMS blueprint uses the example of a student computing his or her family's electric bill to the nearest dollar amount after that student is given the mathematical formula for the computation of kilowatt hours in school.

Phase 5 is the student delivery system. According to Ms. Pope, this is the phase that includes field trips, brochures, and speakers.

Phase 6 provides the evaluation of the system.

In summary, Dr. Wilburn advised participants, "Instead of tacking on career education to the curriculum, be sure that you have a managed system in which career education is shot through and through."

Session 323
Systematic Management of Career Education Programs

Wisconsin Emphasizes Staff Development in Career Education

Mr. George Maki, Principal of Marquis Middle School in Madison, Wisconsin, was the first speaker in a session on Staff Development Practices and Programs in Career Education.

He related that in 1972, Madison became involved in the Fair Education Program through the Superintendent of Schools and the Board of Education in Madison.

"A leadership committee made up of one or two teachers representing elementary, middle, and secondary schools was organized," he said. "One significant move made by the committee was the development of a learning workshop."

He explained that in 1974, teachers and administrators designed an in-service training program to take place in schools, including learning workshops. In these workshops, he noted that participating faculty members make contact with the community involving business and industry.

"The staff is given a choice as to what area of work they wish to become a part of. . .Over 80 percent of the staff members are now involved in some facet of career education," Mr. Maki said.

He also mentioned that another program being set up in the Madison schools involves the establishment of a central information center, where staff members may acquire information concerning career education. The center is run by learning coordinators and assistant teachers, who work with the school curriculum in the science, math, English, and social studies programs, he said.

Mr. Maki also told participants that many faculty members participate in the exchange program, which involves accredited teaching of teachers in the field of career education. All staff must have at least eight hours of such instruction, he said.

The second speaker, Mr. Gene Sturdevant, Principal of Lake View Elementary School in Madison, emphasized the importance of faculty involvement in the business community. In his program, teachers spend five 2-hour sessions visiting industries and acquainting themselves with business conditions outside the classroom. Upon completion of the program, these teachers return to their respective schools and teach other staff members what they have learned.

Mr. Sturdevant also spoke about the shadow program, whereby students spend time outside the classroom in various work settings.

Mr. Robert Brennan, who serves on the Madison Chamber of Commerce, was at one time a teacher. His presentation was focused on the problems of the educational community as seen through the eyes of a businessman.

Session 325
Staff Development Practices and Programs in Career Education

From left, Dr. David E. Sawyer, Chairman, Vocational Education, University of Alabama; Mrs. Glenys Mason, Director of Career Education, Mobile County Schools, Mobile, Alabama; and Dr. Carlton Smith, Superintendent, Hartselle City Board of Education, Hartselle, Alabama, in a session on Small Business in Career Education.

Boston's Trilateral Council for Quality Education Assists Schools

Through groups like Boston's Trilateral Council for Quality Education, businesses are able to assist schools in career education.

Mr. Robert Lamphere, Chairman of that organization and Senior Vice President of John Hancock Mutual Life Insurance Company, said that despite previous problems (e.g., the busing issue), the Trilateral Council is able to help schools on different fronts.

Mr. Lamphere noted that the council was able to initiate partnership programs in which businesses provided resources and materials to teachers.

One specific council program involves computer programming.

Mr. Lamphere commented, "This is a natural—to bring students right into the company. It is also natural for experts from business to come in and review the school's computer system."

The council is also involved in other occupational and career education programs, but these are "much less of a success story than that of the partnership program," according to Mr. Lamphere.

He blamed the career education difficulties on discrepancies over who actually handles career education in the Boston area. He said that part of the problem stems from the "second phase order" from Federal Judge Arthur Garrity which called for a unified plan for career education, but did not give authorities much time to organize. As a result, he said, it is "not a well run effort."

Another area in which the Trilateral Council provides assistance is that of management assistance, especially budget assistance, to schools.

He stated that the Boston school system is one of the most expensive in the country, but it is "not necessarily a good school system" and "badly needs a budget system."

Referring to the "political overtones" of the school system and the reluctance of the Boston mayor to take a leadership position in the busing controversy as factors which "hampered the campaign," Mr. Lamphere told participants that the Trilateral Council will continue efforts on behalf of career education.

"Long-term support is needed. We can't walk away from it. . .As the relationship grows, the reluctance fades," he said.

Session 326
Large Business and Industry in Career Education

Clark Terms Survival of Urban Education 'Dependent' on Industry-Education Alliance

Dr. Donald M. Clark, a member of the Niagara Falls Board of Education in Niagara Falls, New York, and President of the Executive Committee of the National Association for Industry-Education Cooperation, chaired a session on the importance of an industry-education council in a school system.

"What happens when the Federal money runs out for career education?" he asked. "You get decision-makers from industry for direct participation in the educational program," he said.

According to Dr. Clark, the survival of urban education depends on the alliance between industry and education.

Education and industry have a wide communications gap, Dr. Clark contended.

"Schools develop and initiate courses and programs without considering manpower needs and requirements or seeking the advice and help of local business leaders. The result is that students are ill prepared to maximize career opportunities," he said.

As communications between education and business have grown more complex, the need for a connecting link to serve as a forum and to initiate jointly developed programs of action has become clearer, Dr. Clark added.

Noting that it has always been difficult for students to make the transition from the classroom to the world of work, he suggested that the availability of up-to-date educational programs to facilitate students' entrance into the field of work can be increased by recognizing that work and education are so interrelated that neither can exist by itself.

Dr. Clark's advice to educators was to coordinate at the local level through the independent organization of an industry-education council (IEC) in order to establish a link between industry and education.

He emphasized that IECs can broaden the base of corporate support for relevant schooling and channel industry and school resources toward the solution of mutual problems.

Regarding the organization of industry-education councils, Dr. Clark said he felt that there should be at least one enthusiastic person either from school or industry to take the initiative and leadership. He also suggested that a committee be formed to develop a statement of purpose and objectives, and a board of directors (consisting of key business leaders and top education officials) be the policy-setting body. Other committees might include membership, finance, programs, and long-range planning committees.

"It is important that a cross-section of the community's businesses and industries be represented along with the chief school administrator," Dr. Clark said.

He stated that an industry-education coordinator should direct the cooperative activities within the school district and work closely with the council's board of directors. The coordinator's background should include work in industry and broad experience in educational theory and practice, Dr. Clark added.

He commented that school officials should allocate sufficient staff, funds, and facilities to carry out the cooperation function since it crosscuts every area of activity in the school system. Industry should respond, he said, with a commitment of its resources; a substantial number of personnel; special know-how; unique services; sponsored materials; and, when necessary, additional financial resources to meet the objectives of the total industry-education cooperative program.

Dr. Clark listed the following goals for an industry-education council: establish effective lines of communication among industries, businesses, and school systems; develop a positive attitude on the part of educators and business people toward the integration of industry, business, and the community in the schools; compile information that will aid in determining specific manpower needs; prepare occupational information for students; encourage all teachers to view career development as an integral part of each student's growth; encourage business leaders to assist educators in preparing students to become responsible adults; and help school administrators utilize new management techniques.

Dr. Clark said that the primary objective of the National Association for Industry-Education Cooperation is to provide a national organization to promote increased cooperation among representatives of business, industry, education, government, and labor. Another objective of the national association is to identify areas of mutual interest and to formulate programs and procedures which meet acceptable standards. He added that the national association is interested in communicating with any group concerned with education about cooperative programs and projects.

Session 328
Industry-Education Councils in Career Education

Ceres Program Integrates Education and the Community

"On the community level, career education means the integration of all things and presents an answer to the call for reform," stated Ms. Virginia Lish, Curriculum Specialist from the Ceres Unified School District, Ceres, California, in a session on Involving the Business Community in Career Education.

A colleague of hers, Mr. John Avila, Director of Curriculum and Instruction, Ceres Unified School District, contended that without the support of business, labor, and public and private industry, career education cannot be successful. Through their efforts to integrate education and the community, the panelists from Ceres claimed that they are able to offer a program of Career Education Responsive to Every Student (CERES).

Ms. Lish called career education in general, "an attitude toward education, not a course." She said she believes that if that notion can be planted in the minds of the teachers, the individual student can be assisted to meet and maximize his potential.

"This is achieved," she explained, "by making education relevant and applicable for the student."

After elaborating on the California model of career education, she told participants that Ceres developed a goals matrix for each level of education from the model.

The approach used to combine the efforts of the education and business communities takes the form of a cooperative agency, she explained. Business representatives help teachers write new curricula which infuse career concepts into regular curriculum subjects.

"While some teachers may not know how to do this or which subjects apply to different careers, business people can provide this knowledge from firsthand experience," she said.

Ms. Lish called this aid from the business community a "serious and valuable resource."

She noted that on a volunteer basis, teachers may make a performance contract based on the curriculum. The advantages are twofold, in that effectiveness is increased because the same person who writes the curriculum also teaches it, and the teachers are paid for writing and carrying out the contract in addition to their salaries. Seventy-five percent of the sum is paid upon the writing of the curriculum; the remaining 25 percent is paid after the unit is taught, evaluated, and a statement of needed revisions is made.

A slide presentation illustrated one method of infusion. In a simulated community called Reality Land, elementary school children learn to apply their skills and academics to life situations. The simulation includes government, represented by the teacher; a monetary system which includes the spending, saving, borrowing, and lending of printed money; utilities and related services such as desk cleaning and sweeping; private enterprise, run by the students; and a judicial system which makes laws and rulings concerning social matters of Reality Land.

Mr. Avila concluded by saying that there is no separation of vocational training and higher education and stressed that one should have a salable trade before finishing college.

Session 330
Involving the Business Community in Career Education

Project Force Shows Career Education Has Promise for Rehabilitating Incarcerated

According to Mr. William E. Monroe, Career Education Coordinator from the Texas Department of Corrections, there are few places where the new concepts of career education have more promise than in correctional education.

"We (the nation) have long held to the value of the educational process in the production of solid citizenry, while the prisons have been seen as repositories for the system's failures," he said.

From his work on Project FORCE (Fostering Offender Rehabilitation through Career Education), Mr. Monroe said he has identified four major problems in the application of educational opportunities in the prison.

1. Communications–Many people in corrections do not understand what the people in education are attempting to do.
2. Relevance–Most institutions are slow and even reluctant to change.
3. Bifurcation–Education as it is in the "free world" is not transferable to the prison setting.
4. Diversification–Specialized education is badly needed in the prison.

Mr. Monroe said he believes that traditional education is "cluttered with busy work," rather than providing the reality that adults need. Emphasizing that vocational education is not the final answer in rehabilitation, Mr. Monroe said he considers career education the present and most promising alternative.

Still in the formative stages of development, the Windham School District is an example of such an alternative. Created by the Texas Education Agency in 1969, it serves those inmates in the Texas Department of Corrections who had not received high school diplomas prior to their incarceration.

Under the Texas Education Agency, Windham functions as does any other school district, although Mr. Monroe explained that this method–the State school district–offers the best of both worlds.

"It operates within guidelines of the correctional institutions and conforms to State agency rules and regulations. Almost all funds for this school district have been from the Texas Education Agency, which has allowed staff time to be focused on the business of education, and not the scramble for funds," he said.

Mr. Monroe outlined the "realistic" objectives of the program as follows:

1. To survey all State adult correctional institutions to determine the extent of career education models.
2. To synthesize and evaluate education models in corrections.
3. To evaluate the special needs of the school district in the implementation of a career education model.
4. To develop a delivery system for career education in a correctional setting.

He advocated establishment of a school district career education advisory committee, composed of representatives from industry, the State education agency, the local school district, and, most important, the correctional institutions.

Although Mr. Monroe said he believes that more words have been written about career education in its short lifespan than other educational concepts, he stated that correctional education has been largely ignored in the literature and in the practice of career education.

He concluded by saying that the career education concept in a correctional institution can be achieved with the setting of realistic educational goals, of which rehabilitation is the ultimate goal.

Session 334
Career Education: The Incarcerated

Materials Made by Teachers Add Spark to Career Education

"Three years ago, career education materials hit the market. One of the drawbacks, however, is that often a teacher must buy an entire $350 packet just to get one filmstrip he or she desires," according to Mr. Gerald Eddlemon.

Mr. Eddlemon and Ms. Ramona Peters told participants that they think there is an alternative to this and discussed how teachers can make their own materials.

Mr. Eddlemon, Director of Career Education in Orange County, Texas, said his first approach to career education was to spark the school children's interest. To do so, he chose a purple dragon for a mascot. The local Lions Club sponsored a countywide "name the dragon" contest. Over 3,000 entries came in and the career education mascot became Sir Learnalot.

Sir Learnalot began appearing on bulletin boards throughout the school. Every week he introduced a friend from a different occupation. The worker of the week then became tied in with weekly studies.

Mr. Eddlemon said that a teacher can draw from everyday sources for materials to use in class. For example, the yellow pages directory helps the children with math and spelling and increases their awareness of the business world. Children can make hand puppets or people out of paper towel rolls depicting various occupations in which they may be interested. The children always like to get involved in a country store, Mr. Eddlemon added.

He told participants that an inexpensive way to develop the concept of self-awareness is to place a mirror on the wall with a sign asking "Who am I?" next to it.

He also described an inexpensive

way to develop awareness of the 15 career clusters and help with spelling by using a hidden word puzzle in which words relating to each career are jumbled together.

Mr. Eddlemon noted that slide presentations can also be made with little expense. He said that Orange County obtained permission from Steck Vaughn Publishing Company to use the story of Flagon the Dragon as a cousin to Sir Learnalot. Then they used a Kodak Visual Maker to make slides of the book.

The story is about a dragon looking for a job and shows what he must do in order to find the right job.

"The moral is that the first thing you try may not always be the right thing, so don't give up," said Mr. Eddlemon.

Ms. Peters, a teacher from Granbury, Texas, called her materials "teacher motivators." One device she described is a family career tree, which involves the same principles as a family history tree except that the child includes the occupation of each of his relatives.

Another device Ms. Peters uses is the career cluster wheel of fortune. Every week the students give the wheel a spin and they talk about jobs relating to each career when the wheel lands on it.

One plan which requires cooperation from the community allows the students to spend one work day at a local business of their choice.

"This gives the students a chance to see if they really like that field instead of spending four or five years preparing in an area for which they are not suited," Ms. Peters said.

An important aspect of career orientation is public relations, she added. She said she informs the local newspaper about any field trip the students are making.

"It is good motivation for the kids to see their pictures in the paper," she said.

She added that she keeps a bulletin board of all their clippings.

Session 341
Teacher-Made Materials

Nevada Career Handbook Helps Students Set Goals

Entering freshmen at Proctor R. Hug High School, Reno, Nevada, are given a career handbook to assist them in planning a 4-year program of courses for career preparation.

The booklet contains suggested 4-year course outlines in 15 career clusters. The course outlines include State requirements for graduation, cluster requirements, and recommended electives. All of the courses are part of the regular curriculum at Hug High School.

Why the handbook was developed, how it works, and its benefits to students and teachers were explained by Ms. Frances M. Gidney, Vocational Counselor; Ms. Eddie J. McCay, Coordinator of the Vocational Education Program; and Ms. Sandra Lee Slawnik, Business Department teacher, all of Hug High School.

The booklet and its related program were developed to meet the needs of the students and the community, Ms. Gidney said.

Through a program of testing, counseling, and education, students learn to assess their own interests, values, and abilities in order to decide on possible career choices.

"We feel it is important to have a logical process for students to follow in choosing a career," Ms. McCay added. "Students need to focus on their goals and learn to make decisions. If they do not know what they want to do, they will take a hodgepodge of courses and end up nowhere after four years of school."

Ms. Gidney noted that the business community is demanding that the schools turn out students who can communicate and compute, so these courses must be stressed in career clusters.

She related that the career education process actually starts at the junior high school level where students go on field trips and take interest surveys and aptitude tests.

Freshmen entering high school take general first-year courses and go through an orientation process in preparation for choosing a career cluster course outline. They are given the Ohio Vocational Interest Survey (OVIS), the Gates Reading Test, and the Differential Aptitude Test. In addition, they participate in a self-awareness unit as part of their required health classes. Communications skills are stressed in classes, and library orientation is given.

Based on the results of the OVIS, students talk to counselors and teachers about the careers in which they are interested. They also use the career resource center in the library to investigate their interests and possible careers. During preregistration in January and February they complete a 4-year course outline based on a career cluster of their choice.

"Students are not locked into the programs they choose," Ms. Slawnik said.

"Students are not made to feel guilty about the fact that they may want to change their programs," Ms. Gidney added, "but we do want them to make tentative programs at least."

According to Ms. Gidney, if students find their interests have changed, they are encouraged to think about these interests in terms of possible careers and change their 4-year programs.

"This is only the second year of the program, but on the basis of an ongoing evaluation process, students are giving us a mandate to continue," Ms. Gidney said.

There are many benefits to the program, Ms. Slawnik added.

"This program gives purpose to the choices students make regarding classes they take. Students like the program because they can see the end result of all their classes," she said. "Teachers like the program because students come to them prepared to take the classes. This program puts all the courses in a career cluster together instead of fragmenting health, English, etc. The teachers show students how each class relates to the overall cluster."

Ms. Gidney told participants that before the school year begins, the high school faculty are oriented about the program. In addition,

meetings are conducted for parents to inform them of the program and how to assist their children in choosing a career cluster. A community advisory committee is also involved in the program.

Session 343
Career Decision-Making Programs

CGIS Program Provides Job Retention Skills

An experimental curriculum based on cooperative group interaction skills has been developed and field-tested by the Far West Laboratory for Educational Research and Development, San Francisco, California. Dr. Bela H. Banathy is Director of the project, which is supported by the Bureau of Occupational and Adult Education of the Office of Education.

Representing the Far West Laboratory, Ms. Dru S. Robinson, Project Coordinator, explained that the purpose of the project is to expose students to some of the problems of group functioning and to introduce the nature and goals of the Cooperative Group Interaction Skills (CGIS) curriculum.

Ms. Robinson told participants that during the course of the research project, effects of learned cooperative group interaction skills on performance in task-oriented groups were examined. Competence-based instructional materials were developed to teach CGIS and the effects of training high school students in the competencies were tested. The materials were designed to facilitate student growth in areas such as adjustment to task-oriented focus, effectiveness in group performance, satisfaction and self-development in group functioning, decision-making, problem-solving, interpersonal communication, and conflict resolution, she said.

According to Ms. Robinson, the experimental curriculum is designed in eight basic modules, each of which focuses on a specific group interaction skill: (1) group communication helps students acquire skills, knowledge, and attitudes that will enable them to communicate effectively within their group and with other groups; (2) the group helps students learn how to identify and use its resources in order to perform a given task; (3) conflict resolution helps students acquire skills, knowledge, and attitudes that will enable them to resolve conflicts effectively within their group and with other groups; (4) planning helps students learn a planning process which can be applied to either group tasks or individual activities; (5) evaluating group performance helps students learn evaluation processes; (6) leadership and power help students learn some qualities of leadership and study some effects of the use and the misuse of power; (7) decision-making helps students learn some different ways in which decisions can be made in a group; and (8) cooperative effort helps students learn some ways of stimulating cooperative effort within a group.

Ms. Robinson commented that role playing in simulated life situations was one method utilized by teachers involved in the project. Successful application of the interaction skills they had learned provided students with experience to affirm the effectiveness of the CGIS approach.

Ms. Robinson pointed out that teacher training is essential if CGIS is to be successful. She recommended that teachers go through the program themselves before attempting to teach CGIS to their students.

According to Ms. Robinson, the skills described in the curriculum are basic to wholesome everyday human relationships. Acquiring these skills at an early age will help students adjust to a changing society and make the transition from school to work, she said.

Session 344
Job Acquisition and Retention Skills Programs

Ms. Linda Phillips, Career Education Coordinator, Pontiac Public Schools, Pontiac, Michigan, in a session on The Elementary School Counselor in Career Education.

Mr. Gerald Johnson, Project Director, Project Future, Bremerton School District 100-C, Bremerton, Washington, in a session on Evaluating Process and Product in Career Education.

Cox Cites VIEW Program as Useful Tool for Vocational and Technical Training

Not too long ago, former Commissioner of Education, Dr. Terrel H. Bell, raised some academic eyebrows when he said, "To send young men and women into today's world armed only with Aristotle, Freud, and Hemingway is like sending a lamb into the lion's den."

Dr. Walter Cox, Director of the Institute for Research Development in Guidance at Indiana University, said that he agrees with Dr. Bell and feels the continuing overemphasis on higher academic education has produced and is producing a generation of frustrated Americans—"a generation of overexpectant and underemployed, a generation overeducated and undertrained."

Dr. Cox said it has been predicted that by 1985 four out of five jobs will require technical, not academic, training. Projected figures show that same time period will produce over 13 million college graduates, or one million more than the job market demands.

What can be done to help young people learn more about alternatives to higher education? Dr. Cox said he believes that teachers need to begin counseling students in career education.

"Many educators believe that counseling is for counselors, teaching for teachers, and never the twain shall meet," he said. "But I believe that as long as the rate of school counselors to national school enrollment is 1:860, all teachers have a need to counsel to be involved."

Dr. Cox described the Armed Services VIEW (Vital Information for Education and Work) as a tool that can be used to encourage young people to explore vocational and technical training. The VIEW program is now being made available to every school with a twelfth grade in the United States.

According to Dr. Cox, the National Consortium for Career Services serves as a clearinghouse for this nationwide network of State job information programs called VIEW.

He told participants that the Armed Services VIEW program presents materials in both printed and microfilm form which identify related military and civilian careers. The program includes an introduction to the Armed Services and describes training required for over 100 civilian and 450 related military careers.

Dr. Cox noted that six out of seven Armed Services jobs require some type of technical skill or professional training. The VIEW program covers these skills and training, and details what each branch of the military offers with regard to a particular civilian occupation.

Armed Services VIEW also highlights opportunities for women and minority groups. Dr. Cox said it is projected that by the end of this fiscal year, more than 100,000 women will be serving in the military, and they will be working in almost all occupations except those that are combat-related.

Dr. Cox commented that the response to VIEW has been positive.

"It represents just one avenue of exploration for students seeking to identify their own values, abilities, and limitations," he said.

Session 345
Using a Comprehensive
Occupational Information System

Ohio Curricula Incorporate Study of Free Enterprise System and Economics

In Springfield and Willowick, Ohio, students and teachers are learning about economics and the free enterprise system with the aid of simulation games and local businesses.

Mr. Robert Lagrow, Vice President of the Huntington-Lagonda Bank in Springfield, said, "We hear from young people, 'Why should I put out my best effort?' This is indicative of a fundamental lack of understanding of what is necessary to be successful in a business venture. If young people had a better understanding, then their chance for succeeding would improve tremendously. The progress of people and commerce is bonded together."

The Springfield Chamber of Commerce arranged meetings between teachers, counselors, and local business representatives to change the curriculum at the junior high school level to help the students discover their own career interests.

The new program includes a roster of guest speakers who stress to seventh graders the importance of English and mathematics in particular occupations. Eighth graders are encouraged to interview members of the community and research a particular career field. And, in the ninth grade, students are sent out on a career day to work in their "chosen" profession with actual employees.

The Willoughby-Eastlake school system in Willowick perceived that its lack of career education was caused by a dearth of teacher training in economics. Workshops and in-service training were conducted, with classroom and field instruction by 76 business people. Thirty-five teachers also underwent an intensive economics course so that they could rewrite the curriculum and incorporate career education.

Willowick children from kindergarten through senior high school are exposed to simulation games, including Mini-Society, which demonstrates the concept of scarcity through the functioning of a typical community.

The most ambitious simulation game is Roadrunner Village, a mini-community run entirely by students in kindergarten through sixth grade. The children use real money to make purchases from the village stores, eat in the ice cream parlor, or save at the village bank. Parents

teach the participants typing skills for the management of the stores' cash flow.

Students in the Willoughby-Eastlake system also visit actual work sites to learn about the value of money. First graders are taken on a tour of an assembly line to witness mass production. They are also taken to shopping centers to compare prices and types of stores.

To encourage the young people to interact with shopkeepers, teachers send each child to a different store to find what can be bought with a nickel or a penny.

Ms. Patricia T. O'Hanlon, Career/Economics Educational Coordinator for the Willoughby-Eastlake School District, commented, "The children come back from the stores surprised that they can only buy gum or candy. They never before realized how much things really cost."

Both presenters were optimistic as to the growth of their programs.

Mr. Lagrow said, "Businesses are now beginning to realize how hard it is for teachers to teach free enterprise. The business people have the potential to teach better than the schools. They know the basic concepts."

Ms. O'Hanlon added, "Once the children get involved, they enjoy the classes. They become enthusiastic about work and business."

Session 346
Career Education and the Free Enterprise Movement

Illinois Program Helps Students Develop to Their Potential

Ms. Donna Martin, State Coordinator of the Illinois career education program, said that her State's program emphasized that "every kid's a winner. The child has the right to be taught what he needs to know to develop to his full potential."

According to Ms. Martin, with a truly collaborative career education effort, business, industry, labor, and government can overcome the narrowness of their own specialized perspectives and assist educators to convey to youngsters effective images of what the world is like.

The Illinois career education program works from the nursery school level to grade 12. The five basic goals are:

1. To provide career information–Students receive information about the wide variety of jobs, and the fact that there are careers open to all talents. Students are put in touch with professionals already in the field.
2. To assist in developing realistic self-concepts–Students are assisted in discerning what they do best.
3. To aid individuals in narrowing career preferences–Students are cautioned not to make career decisions too early, so that they don't get trapped or overeducate themselves.
4. To develop skills and abilities–People in the community teach and tell of their experiences.
5. To increase individuals' awareness of resources usable to them for a lifetime.

Ms. Martin said that in grades K-6 a career awareness program is followed in which young people learn about work. Grades 7-8 provide career development, an in-depth version of career awareness. Finally, in grades 9-10 and 11-12 students follow career orientation and direction. The connection between school work and the "real world" is emphasized, she said.

"All in all, the Illinois system is designed to defeat the notion that going to college is a guarantee of economic success," Ms. Martin said. "We found that only 20 percent of the people in Illinois making over $15,000 had a college degree, although many jobs require a high school diploma," she added.

Ms. Martin concluded by stressing the need for parents to become more aware of career education.

"Everything must be done to teach children how to live, work, and survive. . . .We must reach all the potential that's not being tapped," she said.

Session 347
Basic Concepts of Career Education

Vild Speaks of Needs Assessment in North Carolina

Ms. Debbie Vild, Coordinator of Career Education for the North Carolina Department of Public Instruction, explained the needs assessment concept and goal processes to explore the kinds of material to be implemented for career education in the North Carolina school system.

Ms. Vild stated that a grant had been awarded by the Office of Education for the development of a State plan to implement career education programs in North Carolina for the next several years.

Defining needs assessment as a technique for identifying goals in certain situations, she explained that there is almost always a discrepancy between the goals identified and the progress made toward achieving each goal (i.e., what a particular situation is, in relation to what it should be in terms of reaching the stated goal).

Ms. Vild discussed two groups of goals: learner-oriented goals (expectations of learner outcomes), and process-oriented goals (activities performed to attain the goals).

Noting that the needs assessment phase of the planning cycle has four parts, she said that the first part is the identification of certain goals. This consists of generating a list of goals, taking a predetermined listing of goals, and deriving the goals inductively after some major concerns have been recognized.

"The second step is determining the present status by taking a survey of existing data, observing student performance, collecting institutional data, and looking at the yearly report of community records," said Ms. Vild.

"Next one should identify the discrepancies between what the situation should be and what it actually is, either in terms of learners or institutions," she continued.

According to Ms. Vild, the last step is the assignment of priorities to the discrepancy analysis. This step, she said, implies the ability to measure attitudes from demographic and socioeconomic data.

Ms. Vild used the example of the Arizona State Department of Public Instruction Survey taken in 1971. In this survey, a random sample of the State's population of parents, business people, and school educators was asked if schools help with career education now, and if not, whether they should.

From the data analysis of this and other surveys, Ms. Vild said that one can prioritize goals according to the percentage of respondents who indicated schools should help learners attain career goals.

She also mentioned that one can calculate the difference between what the surveyed population feels the schools *should* be doing and what they are doing now.

"One can rank the differences from largest to smallest in the data analysis, thus providing a basis for establishing the priority concerns of the population," she said.

In terms of achieving prioritized goals, she suggested strategies such as hiring teachers to add new courses, a student-to-student tutoring alternative, or retraining teachers to infuse career education into the curriculum.

She said that time, cost, acceptability, and the socio-psychological aspect of each alternative to implement career education in the schools would have to be considered so that the best programs to meet the schools' needs would be selected.

Session 348
Needs Assessment Procedures in Career Education

Inner-City Akron Becomes Career Education Classroom

"The resources of the inner city are unbelievable!" said Mr. Nick Topougis, Director of Career Education, Akron Public Schools, Akron, Ohio. "Proof of this is seen in such schools as Central-Hower High."

Located in inner-city Akron, in the city's lowest socio-economic sector, the school has had to close its rolls to applicants from other areas.

According to Mr. Topougis, Central-Hower's career exploratory program enables its students to explore actual job situations, and to enter college or technical school with a head start in the career of their choice.

"Central-Hower is not an isolated success in Akron," he said.

He told participants that over the past seven years, the city school system has developed a career education program for K-12 that is uniquely designed for its urban, largely working-class population.

In Akron, Mr. Topougis noted that production jobs are slowly disappearing and the community is changing from blue collar to service-oriented. Although 40 percent of the students are in college preparatory courses, only 18 percent go to college; thus, a clear need for career education exists, he contended.

"Career education in Akron must fit into academics," he said.

Since teachers are not trained to do this, Mr. Topougis has a staff of eight, all with guidance background and teacher training. These career coordinators assist teachers with infusing career education into the curriculum, provide materials, and answer questions. They also have a business-industrial-labor liaison.

The coordinators work with four Akron high schools funded for career education.

The "unbelievable resources" of the urban setting, which Mr. Topougis and his staff exploit, are the many industries, shops, stores, professions, service-supplying firms, and financial institutions found in a city, such as Akron, which has been built upon industry.

Mr. Topougis asserted that contacts with this multi-faceted world of work are many in the career education program of the public schools.

The first grade class walks down the street with their teacher to watch a telephone lineman climb a pole. Students talk to him, ask questions, and he answers them. Sixth graders visit a bank and talk to personnel there. High school students spend days in the business and industrial world.

"There is a world of work out there," says Mr. Topougis, "and that world requires credentials."

He noted that personnel managers talk to high school students about what it takes to get a job before someone else does.

There are special programs with many companies, nursing homes, and hospitals.

"How did you get your job? What training did you need?" the students ask a young doctor, a nurse, a lab technician.

Mr. Topougis said that students serve as interns to city councilmen, work in factories, and help architects restore Akron's old buildings.

Through community resource workshops, 17 businesses provide in-service training to teachers in their places of business during vacations.

"The teachers are not paid; yet all requests for this training cannot be filled, because the teachers find career education training helps them to teach," he said.

He added that teaching staff development has taken seven years to reach its present level of excellence in career development.

"You need a powerful organization to work with you in an urban setting. Don't try to do it yourself. Do it together," advised Mr. Topougis.

He mentioned that the Akron Regional Development Board works with the Akron public schools, not merely as an advisory group, but with tasks to perform and direction to provide.

Discussing curriculum as it relates to career education, Mr. Topougis said, "We thought at first that we just needed some beautiful guide, given to the teachers, and the job would be done. But we found

that career education must get into the curriculum."

Now, according to Mr. Topougis, his staff infuses the "whole gamut" of career education into the elementary grades: economics, self-awareness, and decision-making. For example, in the reading program, staff members determine what skills the child needs, do testing to find out individual weaknesses, and then use materials to help the child to work on them. The parents of preschoolers learn skills to create a productive and stable home life.

The career education program serves 33 percent of the Akron schools. Mr. Topougis noted that insufficient funds prevent the spread of the program citywide.

Every year the program is evaluated internally by the Ohio Survey Test, administered by teachers, and externally by an outside organization.

Mr. Topougis stressed that the success of the Akron program is due to the heavily industrialized nature of the city and creative utilization of city resources.

Session 350
Career Education Practices:
Large Urban K-12 Settings

Mr. Robert Pittman, General Manager, Mississippi Economic Council (State Chamber of Commerce), Jackson, Mississippi, in a session on The Chamber of Commerce in Career Education.

Providing information in a session on Mobile Units in Career Education are, left, Mr. Robert Komorech, Director, and Mr. Ken House, Resource Facilitator, both from the Career Occupational Resource Center, Meridian School District 101, Mounds, Illinois.

Dr. Richard Oxhandler, Special Project Coordinator, Kalamazoo Valley Community College, Michigan, in a session on The Post-Secondary Counselor in Career Education.

From left, Mrs. Marguerite Miller, Team Leader (Seventh Grade), Washington Junior High School, Ottumwa, Iowa; Mr. Donald J. Davis, Career Education Consultant, Area Education Association No. 16, Ft. Madison, Iowa; Ms. Joyce Williams, Consultant (in Mental Retardation), Area Education Association No. 15, Ottumwa, Iowa; and Miss Imogene Diekman, Home Economics Teacher, Washington Junior High School, Ottumwa, Iowa, discuss Project Discovery in a session on Career Education Practices: Middle/Junior High School.

Vineland Schools and Glassboro State College Cooperate to Reform Curriculum

Vineland, New Jersey schools began implementing career education in 1972. Since then, the curriculum has been reformed to include career education in every subject from kindergarten through the twelfth grade.

The United States Office of Education awarded a grant to Glassboro State College in cooperation with the Vineland public schools for curriculum reform and follow-up of this program.

Dr. George S. Lulos, Jr., Director of Career Education at Glassboro State, and Mr. Fred Rosi, Director of Career Education for the Vineland public schools, described the program.

They noted that the change process to develop career education comprehensively in the schools and the community involves curriculum reform, coordinated guidance, work experience, placement and follow-up, community resources, and in-service training for all school staff.

Mr. Rosi said that one elementary coordinator is assigned to each of Vineland's 17 elementary schools. The coordinator becomes a staff member of the school and is responsible for its career education program.

Dr. Lulos mentioned that a parent education program, an adult evening course, is offered each semester with separate sections for elementary, middle, and secondary levels. This program involves the parents' participation in the career development of their child(ren). Parents are encouraged to support the program by using the home and neighborhood environment as a learning laboratory for self-assessment, decision-making, and work experience.

Mr. Rosi noted that career education is infused into the curriculum for each ninth and tenth grade student for the entire year. This supplements classroom activities by demonstrating the relationship of career education to academic areas. Regular teachers not only teach subjects, but explain their value by relating them to available careers.

According to Dr. Lulos, staff members of each school participate in an in-service training workshop with faculty members from Glassboro State College. Staff members meet for two weeks prior to and following the school year to learn about and evaluate the fundamentals of career education and discuss their responsibility for its progress.

The students benefit through their own firsthand knowledge after visiting places of interest and participating in hands-on activities such as using power tools, Mr. Rosi said.

According to Mr. Rosi, the results of the program have been rewarding for both the students and the teachers of the Vineland community.

Session 351
Career Education Practices: Suburban Settings

Career Education Makes Prime-Time TV

Commercial television has made a success of the commonplace and not so commonplace work world.

What may seem dull to some has proved to be quite interesting to many viewers in the Philadelphia, Pennsylvania broadcasting area.

"What Do You Do?," presented by KYW-TV on Wednesday evenings at 7:30, is a commercial prime time success. Ms. Anita Klever, program hostess and co-producer, has received the Peabody Award for her efforts with the show. She attributes her success to the interest of young people and "the warmth of people who really dig their jobs."

"What Do You Do?" is a new concept in television which succeeds in capturing the attention and interest of people of all ages. This half-hour program, done in magazine format, serves as a weekly "window shopping tour" in the world of work, which takes the show on location, filming various interesting and exciting jobs people do.

Each week, several different young people, with the program's hostess, Ms. Anita Klever, assume the role of the worker and get a taste of what life is like on the job market. Through the eyes of these young people, many workers are observed and investigated.

The jobs are presented in an entertaining but informative technique. A wide variety of people and professions make up the scope of the program from the usual to the unusual.

The children used on the programs range in age from eight ("but that's young") to 15. The 11- to 12-year-olds seem to work out best. They are unpaid nonprofessionals, taken mainly from the Philadelphia area in order to avoid travel problems. They are selected based on letters they submit indicating their interests. These interests are then matched with locations where the show will be filmed.

Usually, one segment is shot in a day. Ms. Klever "scouts" the sites before bringing in the crew for the shooting. She attributes the technical success of the show to the crew.

"We were able to sell the show to Westinghouse because the people who work on it are so talented. The cameramen are fantastic," she said in response to a question from the audience.

"What Do You Do?" [illegible] its second season with every prospect for continued success. It is definitely produced for commercial TV and is not available to schools. (Ms. Klever said she feels this would detract from the viewing audience.) Interested persons can contact Mr. Don McGannon, President of Westinghouse Broadcasting in New York, to appeal for release of the

show.

The show is not syndicated at present, but Ms. Klever feels it is quite marketable and said she would like to see other TV stations carry it as a regular part of their programming.

Session 403
Prime Time Television for Career Education

Economic Education Seen as Answer to Consumer Effectiveness

"Forty million adult Americans are minimally competent to be effective consumers," said Mr. Ronald Coleman, Consumer Education Coordinator for Montgomery Ward and Company.

In a session on the Bottom Line for Business in Career Education, he and Dr. Thomas Lombardo, Executive Director of the Texas Council on Economic Education (TCEE), Denton, Texas, spoke of traditional education's failure to prepare the nation's youth adequately for competent citizenship.

"Only two percent of all Americans can explain the relationships among business, consumers, and labor," Mr. Coleman said.

According to Mr. Coleman, fewer than one-third of our high school students and even fewer college students receive any instruction in economics.

"If we look closely at education, we find no preparation for life. We lose sight of education's end product, which is to prepare citizens to cope with living life," he said.

After quoting Dr. Sidney P. Marland, Jr.'s statement that the USA is the richest nation in the world and yet has the highest youth unemployment in the world, Mr. Coleman described Montgomery Ward's efforts to remedy this situation. Ward's has instituted a series of courses, interspersed with seminars and workshops, designed to introduce and educate teachers and other groups to the positive aspects of the free enterprise system, and specifically, the retail sales business. The company uses its own work-force, during "slack time," supplemented with experts from its Consumer Education Division, to help teachers develop curricula to bring back to their classrooms.

"We want to capitalize on this," said Mr. Coleman, ". . .the motivation is there. Well-informed consumers contribute to the economic well-being of themselves and the total economy."

He added that if business is to attract skilled employees, people must develop a positive attitude toward business.

"A higher level of economic understanding promotes a positive attitude toward business," he stated. "Montgomery Ward and Company is acting as a catalyst in this process by opening new avenues of credible education in the classroom."

He concluded with the famous quotation from John Donne, "No man is an island unto himself. . .," and summarized his presentation by stating that business organizations seek to strengthen the quality of life.

"Business is judged as much by its social accomplishments as by its profits," he said.

Next, Dr. Lombardo described some ways in which business and education can cooperate to achieve an increased understanding of economics.

Dr. Lombardo began by stating, "As individuals, we are required to serve as citizen-voters, consumers, and workers. In these roles, we are influenced by a significant number of economic forces. If we are to serve these functions efficiently, we must understand these forces."

He continued, "Economic reality is manifested in many ways—in unemployment and inflation, to name but two. Economic theory gives some understanding of these forces."

He went on to describe the TCEE as a nonpartisan, nonpolitical, nonprofessional group, dedicated to improving the quality and quantity of economic understanding in the US. The council is composed of businessmen and representatives from the educational community, in roughly equal portions, with an occasional official from organized labor. Stressing the Americanism of the council, Dr. Lombardo noted that all council members are committed to private enterprise and the democratic process.

The TCEE, and its 47 affiliated Councils on Economic Education (Connecticut and Alaska do not have councils), have sponsored a number of programs to furnish qualified persons to develop an economic education program for students. One such effort is the TCEE's teacher training program, implemented through a network of six university-based centers, plus a center in the Houston Independent School District. This program is designed to help teachers from K-12 levels and all academic disciplines develop techniques and classroom materials. The centers are also used for employment trainee programs to increase economic literacy.

The TCEE supports these programs financially, through contributions from participating businesses. The education contingent of the council is charged with primary responsibility for all council programs; business supports the programs by providing expertise and funds. The programs provide practical presentations to teachers, according to Dr. Lombardo.

The goal of the TCEE is to change the attitude and behavior of teachers and students toward business. To do this, Dr. Lombardo called for institutionalizing an understanding of economics. Organizations like Sears, Roebuck, & Co.; Montgomery Ward and Co.; the Exxon Corporation; the J.C. Penney Co.; and the AFL-CIO have joined with the council in this effort.

The companies involved feel that their support of TCEE's programs is in the area of public service. It is, according to TCEE, a social investment, whose return is increased understanding.

"It is worth the investment," Dr. Lombardo said. "The companies recognize that today's students will be tomorrow's customers. Economic literacy means better, higher salaried customers."

Session 405
Bottom Line for Business in Career Education

Flint Schools Develop Community Education Concept

"Flint, Michigan is the laboratory for community education in the nation," said Mr. Dave Doherty, Director of the Division of Research and Development in Flint schools. "We have tried to make the school system totally involved with the community."

Flint developed a concept of community education defined as "the process whereby the schools offer leadership and invite others to join in bringing together the community and its resources to improve its quality of life, particularly as it affects the opportunities of each individual to achieve maximum development as it brings the school into a partnership with the community for career awareness, exploration, preparation, orientation and placement for the students."

Flint schools have about 39,000 students, with 56 percent of those minority, according to Mr. Doherty. Most of the students have family members employed by General Motors (GM), the largest employer in Flint.

The Charles Mott Foundation, largest GM stockholder, provides an annual $5 million for Flint schools.

"About half of this is ours to move in and out of experimental programs each year," Mr. Doherty said. "We add and drop different programs every year."

Among Flint's programs is the counseling service devised by Flint schools.

"Our counselors no longer counsel just the 25 percent of students that are college-bound," Mr. Doherty said.

He noted that Flint schools have a full-scale placement office that prepares students for job interviews and helps them seek employment, either full- or part-time.

"We have a centralized student placement office which is an effective link in providing feedback between employers and students," he said. "The employers can evaluate each employee's background and tell the placement office what is good or bad about it."

He stressed that the counselors are an important part of this system.

"The counselors visit student work sites weekly and assist students just out of high school in their transition from school to work," he said. "The counselors talk to employers and employed and see what can be done."

Mr. Doherty related that Flint students are hired by GM before they finish high school and are paid from $350 to $510 weekly. He said that these students are the least prepared for the job because they have not finished high school. Students who stay in high school become disillusioned because they see the "fantastic" wages the dropouts are receiving, he added.

"To combat this dropout problem we send counselors to the dropouts' homes to lay it on the line," he said. "We tell them about the advantages of graduating and make them aware that we offer a placement office, counseling service, and an alternate high school program (work and study during the day)."

Out of 900 dropouts in 1975, 425 were brought back in this manner to attend school, according to Mr. Doherty.

He mentioned that more than 50 percent of Flint students are involved in part-time work. Cooperative education programs allow students to receive classroom and on-the-job training.

"The student can receive subsidized work experience in cooperation with business and labor," he said. "With this cooperation youngsters can relate their education to the real world. They realize the necessity of things such as math and science," he added.

Cooperation between the schools and business and labor has also produced career laboratories where junior high school students can get a perspective of different job opportunities through slide-tape presentations, a career index, and other guidance material.

Students can also visit local businesses once or twice a month and observe the operation of each business as part of their schooling, he stated.

Session 412
Career Education Practices: Community Education Setting

Carson City Counselor Sees Her Role as Motivator

The role of the school counselor in career education is one of a motivator, according to Ms. Myrna MacDonald, Carson City High School Counselor, Carson City, Nevada.

She began by stating that Carson City High School received a Title III mini-grant to provide "career exploration field trips to local places of employment" for interested students. The field trips include all career clusters.

"The students apply for the field trips and a faculty committee decides who should go based on the students' interest," Ms. MacDonald said.

She noted that the optimum number of students is about 15 per trip.

The field trips include a hospital, the local sheriff's department, a judge's quarters, a business, and a nearby hotel-casino. During one trip to the casino, she mentioned that students observed the hotel convention facility, food and beverage services, slot machine mechanics, cashiers, and numerous other career possibilities.

"The students were very interested in asking the workers about their personal career lifestyles," Ms. MacDonald said.

Color slides are taken during each field trip to be used by students later and as an orientation for new students.

In addition to the field trips, Ms. MacDonald has set up observation stations at potential employers' working establishments so students can watch employees performing their jobs.

"Students have reported that their primary desire is to observe typical work activities," Ms. MacDonald said.

She added that the observation periods are one hour long.

Ms. MacDonald cautioned, however, that counselors should only get the program started, not work at it constantly. Her job is to get faculty involved in the actual mechanics of the career education program. Once the program is under way, she said the counselor's job is to follow up.

"Counselors should work on getting the program infused into curriculum, seek professional counselor support, push legislative efforts to get support on the State level, and evaluate and improve the program," she concluded.

Session 414
The Secondary School Counselor in Career Education

New York School Board Considers Curriculum Change

A concerned school board can quickly effect a curriculum change for career education in spite of previous inaction in the school system, according to a board member from Brooklyn, New York.

"It helps to have the spark come from the school board," stated Dr. Amelia Ashe in a panel discussion on The School Board Member in Career Education. "When a board member begins to talk, even the superintendent starts to listen. If the board asks the right questions, everybody wants to get very busy and say, 'We're already doing it,' even if they have just started."

Dr. Ashe added, "It's better still if the push comes from lower levels, but that doesn't always happen."

She acknowledged the need for more than questions in obtaining a commitment to career education.

"Pressure is great, but money is better; the program has to be funded. The way to start a program is to get some vocational education money from the State level, with a statement that if it (the career education program) works, it will be put on the State levy," she said.

Dr. Ashe also pointed out the need for support from industry and labor.

The New York Board of Education has been aided by the Advisory Council on Career Education, an organization with industry, business, and labor representatives. Dr. Ashe credited the council with saving an apprenticeship program after cuts in the budget for education.

Mr. Stephen Aiello, another panel member from Brooklyn and Vice President of the New York Board of Education, discussed the need for career education for board members and the public.

Mr. Aiello stated, "My job is forwarding and interpreting career education to the lay public to make a smoother transition to the program. Any educational concept will become more than rhetoric, if you understand it, feel it, and can translate it."

He expressed enthusiasm for the New York efforts for career education.

"We have a student population of over 1.1 million students. . .and many social and ethnic problems. . . Career education as an educational concept perhaps has the greatest potential for solving these problems," he said.

Mr. Aiello warned against using the program to proselytize for "prestige" jobs.

"Historically, education has stressed white collar occupations to the detriment of other occupations. The board feels that career education must convey the attitude that skilled jobs are worth doing and worth doing well. Career education will provide genuine freedom of occupational choice," he said.

The limitations of the projects concerned panel member Mr. George R. Quarles, Chief Administrator for the Center for Career and Occupational Education in Brooklyn, New York.

He pointed out, "Fifteen thousand students don't get occupational education because there are no slots for them. There are 1,500 kids in that program, but 15,000 want it."

Mr. Quarles prescribed an integrated approach to career education, explaining, "It should not be a single center for education. It must permeate the entire division. It can also work with English and *all* instructional units."

Mr. Quarles also decried spending too much time on planning phases and not enough on implementation.

"Look for funds," he exclaimed, "take the money you have, use it for career education, and *stop* complaining."

Participants discussed with the panel proposed requirements for the inclusion of "life skills" and "character" components in the requirements for a high school diploma. The "life skills" clause would state that the graduate could compute his income tax, use a balance sheet, and understand how a business operates. The "character" stipulation, the more controversial of the two proposed requirements, would ensure that the graduate possessed adequate interpersonal skills to hold a job.

Mr. Morris Shapiro, Vice President for Vocational High Schools and member of the United Federation of Teachers in New York City, stressed, "The job market doesn't want automation. More people lose jobs on poor character than on poor ability."

He added that the "character" judgment would be based on more than one teacher's evaluation of the student.

Audience member Ms. Barbara Quarles, Counselor at the Bronx Community College in New York City, disagreed with Mr. Shapiro: "I'd hate to think my students think they *are* their grade. If you put a citizenship grade on the diploma, you're judging what the students *are*. And people do change."

Session 419
The School Board Member in Career Education

Economically Disadvantaged Benefit From Career Education Programs

The Industry-Education Council of California sponsors several programs designed to assist the economically disadvantaged student in making reality-based career decisions. This session highlighted efforts to implement career education in Abraham Lincoln High School and Woodrow Wilson High School in San Francisco.

Mr. Robert Fesler, Teacher Career Education Coordinator at Abraham Lincoln High, described his school as "a school in transition." Commenting that the school was designed for different clientele than it now has, Mr. Fesler noted that it opened in 1940 in an area of the city that was 100 percent middle class.

"At that time the faculty was preparing students for college, and 50 percent of the graduates attended 4-year colleges while 35 percent attended community colleges," he said. "The faculty was highly departmentalized and academic in its outlook because its role was to prepare a middle-class student body for college."

Presently, the student body is 35 percent white, 35 percent black, 15 percent Spanish-speaking/Asian, and 13 percent bilingual. Only 15 percent of the student body members read at grade level and are clientele for college preparation, Mr. Fesler said.

He noted that although the faculty remains fairly stable with little turnover, the student population changes rapidly.

This is the first year for career education at Lincoln High School. The program started through an Industry-Education Career Education Steering Committee at the school.

"It is not possible to move people around like pawns and make classroom changes simply because you adopt a set of guidelines or objectives," Mr. Fesler said. "The faculty really runs what happens in a classroom, and making changes is a process of persuasion and not of mandate when you come down to the reality. The fascinating thing about career education is that it tries to recognize these realities," Mr. Fesler said.

He discussed a 9-week program for all sophomores at Lincoln High except the 15 percent who were reading at grade level and related that, of these students, 90 percent had no career orientation from their earlier school experiences.

"Our initial goal is to get the kids to see school as a place that can be a service to them. . .where they can get what they need," he said. "To do that, we must help students to discover and define their goals and to discover that they have some control over their own lives."

He commented that career awareness, self-assessment, and self-awareness sometimes seem threatening to students because school has been a less than satisfactory experience.

"It shakes their sense of security to look at their grades in the ninth grade; it is a startling experience when they figure their grade point average," he said.

Noting that Lincoln High was going into its second year with career education, Mr. Fesler commented, "Victories are possible with education, but it won't be easy. The kids coming into the career education curriculum have occupational interests from doctor to dishwasher. Whatever their choice is, we have them investigate it and do a report on that career. The kids recognize that there are certain steps involved in being in a career and they must decide whether they can meet those steps."

Dr. Armand Magid, Career Education Project Coordinator at Woodrow Wilson High School, discussed career education progress at this school, located southeast of San Francisco.

Noting that the Woodrow Wilson High student body is 60 percent black, 12 percent Filipino, 10 percent Latin, 11 percent white/other, and 2 percent white/Samoan, Dr. Magid said that Woodrow Wilson High School is the classic model of the disadvantaged student.

"Our school ranks in the second percentile in reading, third percentile in math, and thirteenth percentile in spelling," Dr. Magid said. "There is only one high school in the State that ranks lower."

He told participants that in 1974, school staff met with representatives from the Career Education Office to develop learning activity packages that were essentially curriculum-based programs.

"While we recognized that exploratory work experience was important, we realized that students needed support to acquire knowledge of the world in a meaningful way," he said. "We have an academic classroom base, but we also conduct exploratory programs out of the classroom."

In one project the students work out of the general hospital where they explore the medical field from radiology to pediatrics. In addition to the shadow program, students have an opportunity to listen to lectures of the hospital staff on health care needs and learn scientific background on particular medical procedures.

One program deals with banking and finance. Students spend two days a week in class, where they get the traditional approach to economics. Three days are then spent working in a bank, where they go through seven different job stations from account clerk to computer operator, he said.

All of this is based on a 9-week career awareness program offered in the tenth grade.

Support services include a career center with a work experience coordinator, a volunteer career and information person who comes in one day each week, and guidance counselors who do follow-up work with students in the program, Dr. Magid said.

After two years' involvement, programs are moving slowly, he said.

"We need more programs in fine arts, performing arts, etc. We hope to expand our program within the

next year so that more students may be able to participate in career education," he concluded.

Session 421
Career Education: The Economically Disadvantaged

'Buddy System' Used to Pair Educators and Businessmen

Dr. Bill Jessee, Professor of Counselor Education at the University of Missouri, Kansas City, Missouri, and Mr. Jerry Michael, representing the National Alliance of Businessmen (NAB), Kansas City, Missouri, told participants about a series of career guidance seminars in Kansas City which they helped organize to facilitate direct cooperation between educators and businessmen.

They related that since 1974, "buddy system" gatherings have paired educators and businessmen in workshops. According to Mr. Michael, the original purposes were to make educators aware of financial resources in the community and to diminish stereotypes between the two concerns.

"The sessions gave the educators someone with whom to confer and negotiate and provided the businessmen with a deeper insight into the academic life," he said. "The seminars consisted of formal discussions and field trips in which educators went to the businessmen's offices and the businessmen visited the educators' schools. The businessmen talked about industry, their type of business, product activity, their work force, and the kind of jobs available."

"The Missouri concept is to infuse career education into all phases of the curriculum," Dr. Jessee stated. "The Missouri thrust is extremely effective."

In Kansas City, over 50 major firms have already participated in the program.

"Our job is to locate resources in business," Mr. Michael explained.

He said that the NAB has recently set up an advisory board to examine the success of the buddy system. The board is seeking new ways to raise funds and hopes to issue evaluation forms to the educators and businessmen who have participated and are currently active in the program and to elicit qualitative statements from both sides.

"From our research, the NAB recommends that more economic education be included in school curricula, programs be expanded to include community colleges, and school board members that are businessmen take a more active role," Mr. Michael stated.

Mr. Michael urged all interested educators and educational staffs to contact the NAB immediately.

Dr. Jessee praised the program's buddy system and commented that the program has expanded communications between business, labor, industry, and government.

"Schools are now free to ask the NAB for participation. By increasing business and educator understanding, everyone benefits," he concluded.

Session 426
The National Alliance of Businessmen in Career Education

Mr. Jim Haun, Manager of Publications and Director of Advanced Career Training, Rockwell International, Space Division, Downey, California, in a session on Volunteerism in Career Education.

In a session on The Secondary School Counselor in Career Education, Mr. Roger Wetzel, Guidance Director, Oregon Public Schools, Oregon, Wisconsin, leads a group discussion.

Utah Programs Bring Schools and Community Together

Three programs concerning the involvement of business and the community were described in this session. Project Cooperation; the Business-Industry-Community-Education Partnership (BICEP); and Experience-Based Career Education (EBCE) are three programs developed in the area of Salt Lake City, Utah.

Project Cooperation provides vocational training for disadvantaged students, dropouts, or potential dropouts from the age of 14 to 21. One of the main objectives of this program is to assist and encourage the student to complete high school credits. Of the 400 students participating in Project Cooperation so far, a 97 percent enrollment back into high school completion programs has been maintained, said Dr. Ken Hennefer, Manpower Specialist, Utah State Board of Education, and Chairman of the Project Cooperation advisory committee.

He said all students enrolled in the program must be referred by a school counselor. Referrals also come from parole boards, the NAACP, halfway houses, and community action services, but even these students must visit a high school counselor before being accepted, he noted.

The program uses three methods to achieve its goals. One is classroom training. Vocational classes are offered in most of the high schools located in the five school districts which participate. Students may attend classes in a district other than their own and still receive credit at their home high school, Dr. Hennefer said.

Another component is on-the-job training, open to students aged 17 to 21. The student receives 600 hours of paid training and works between 15 and 40 hours per week. The employer is reimbursed one-half of the total wages paid. A major factor here is job placement after completion of the training. So far in this phase, the program has an 85 percent retention rate, Dr. Hennefer said.

A third component of Project Cooperation is work experience. This phase is aimed at students aged 14 to 18 who bear the burdens of economic and social pressures. The students work 15 hours per week in paid positions for public service or nonprofit organizations. The employer is reimbursed 100 percent for total wages paid.

Just as Project Cooperation is a cooperative effort between five school districts in the Salt Lake area, the BICEP is based on the cooperation of four school districts. It involves 130,000 students from grades kindergarten through 12. This career exploratory program gives students exposure to a number of occupations.

"It helps them to zero in on their specific interests," said Dr. Donald Wright, BICEP Director.

BICEP acts as a go-between for the school and the community by providing the following services: work experience internship for grades 10-12; career reference material for all grades; plant-office tours for all grades and job discussions for grades 7-12; plant-office observations or "shadowing" for grades 9-12; and speakers in class for all grades.

"We ask businesses to provide as many of these services as they can. Then we go to the teachers and show them what we have to offer," Dr. Wright said.

Descriptions of the 500 participating firms are catalogued in a resource file. Teachers' requests are matched with specific services offered by a business and a confirmation card is sent to both parties.

According to Dr. Wright, a record is kept of the number of times and specific dates a firm is used for any service. He said that approximately 27,000 requests can be filled, but "the program is at the mercy of the teachers" to make those requests. Every school is encouraged to have a BICEP representative to keep track of the school records.

EBCE, unlike BICEP, concentrates on the secondary level of education. It is a national program which turns the entire community into a classroom, Mr. Louis Cononelos said. Mr. Cononelos is the EBCE Project Director at Highland High School in Salt Lake City, Utah. Highland High uses the model of a San Francisco school which has four basic concepts. First, the curriculum is career-oriented; second, learning is experience-based; third, learning should be community-based; and fourth, the students should be allowed within certain limits to determine what studies they should pursue.

According to Mr. Cononelos, 75 community organizations participate. The enrollment of students is presently limited to 75 seniors selected at random from applications. A student begins by going through an orientation and then makes a tour of the plant or office in which he feels he would like to work.

After choosing a place of employment, he/she then fills out a learning plan with the counselor. No credit is given until the project is complete, and credit varies according to each plan. For example, if a student needs English credit, he or she can apply for a learning plan in the communications field or any business which would utilize English skills.

"There is a marked improvement in attendance," Mr. Cononelos said. "Basic skills are also improved. The students become more adult-oriented because the responsibility is placed all on their shoulders."

Although these three programs are all different in nature, the basic principle is the same. All three aim at bringing the students and the community closer together.

"Businessmen have been receptive," Mr. Cononelos said. "They recall their high school education and some say it was not what it should have been. They are glad to help the students to have a direction."

Session 427
Involving the Business Community in Career Education

Jefferson High Focuses on Special Education Programs

A program focusing on special education services provided by one New York high school was presented by a panel from Brooklyn, New York. Speakers included Mrs. Margaret Baird, Mr. Byrd Drucker, and Mrs. Frances Yauch.

Mrs. Baird, Principal of Thomas Jefferson High School in Brooklyn, made the introductory speech.

"It is necessary for us to make adaptations in the curriculum which will make it possible for students to cope with problems they may encounter in today's world and for us to prepare the students for the future," she began.

Mrs. Baird noted that to meet the needs of various groups of students, Thomas Jefferson High School has initiated several special programs. These include the College Discovery Program, which is federally funded under Title I; the Co-op Program, a work study program; and the Classes for the Emotionally Handicapped (CEH) program.

Mrs. Baird expressed particular concern with those students who are emotionally handicapped and emphasized that obligations to the emotionally handicapped are as great as they are to any other group.

She stated that Jefferson High has 26 students registered in the CEH program. Each of these students has been certified as emotionally handicapped by the Bureau of Child Guidance, after consultation with the students and their parents, by a team of professionals including a Board of Education Supervisor in Special Education, a psychologist, a social worker, and a guidance counselor.

According to presenters, the CEH program has been set up as a school within a school and has been assigned two classrooms in the main building for special instructions. Mrs. Baird related that the students spend a portion of each day in these rooms receiving special instruction, either individually or in groups. She stated that for the remainder of the day, the students are mainstreamed–i.e., placed in regular English, math, and science classes.

According to Mrs. Baird, "Many disturbed students are in the mainstream and may go unrecognized as being in need of that kind of special help."

Several such students have been sent to her for guidance conferences and have been recommended for possible placement in the CEH program.

Mrs. Baird said she feels basic skills training, liberal arts training, and vocational and career education are needed by all students.

She concluded, "At Thomas Jefferson, training in all of these areas is available to the emotionally handicapped student as it is to the others."

Another special program found at Thomas Jefferson is that of the Alternate School, pointed out Mr. Byrd Drucker, Director of the school.

"The students who attend the Alternate School are those students who have been 'turned off' to education, and do not find a relationship between school and future employment. Many of them nurse feelings of distrust toward education and have a lack of self-respect for their own lives," he said.

Noting that the program is operated on a modular system, he described the first mod as one of orientation both to self and to work.

"Orientation to self involves a great deal of self-exploration in an attempt to discover who, what, and where you are as well as what you want to be and how to get there. Orientation to work takes students into six specific employment situations. The kids learn the skills of writing resumes and job applications and acquire the techniques necessary for successful interviews. They are encouraged to read the *New York Times* want ads and to locate jobs they had not known existed," he said.

Mr. Drucker mentioned that the second mod consists of regular classes with an emphasis on career training. These classes are integrated with the business world, he said.

"The third modular period in the Alternate School is observation internship. A shared instructor spends afternoons in high school vocational settings. Each school year a student must develop one employable skill in order to fulfill his/her contract," he noted.

According to Mr. Drucker, the fourth and fifth mods are spent in actual internship, a time in which the school attempts to "turn students on to themselves."

Presenters concluded the session by stating that through these special education programs, Thomas Jefferson High School is attempting to make a real, concrete contribution toward career education for all students.

Session 428
Career Education Practices in Special Education

Panelists Find Educational Materials Contain Much Sex Stereotyping

Ms. Daisy K. Shaw opened a panel on Women in the World of Work by observing that progress is slow in the struggle to afford equal opportunities to women because traditional roles are frequently opted for.

Although she noted enthusiastically several breakthroughs in equal opportunity for women, she added that she planned to discuss methods of eliminating sex stereotyping of traditional male and female roles.

Ms. Shaw, Director of Educational and Vocational Guidance for New York City's Board of Education, contended that children are programmed from the cradle to accept traditional roles, starting with pink for girls and blue for boys. She commented that children learn these roles from men and women depicted in storybooks and readers, where men are rough and tough, courageous, executive types while women play supportive, appreciative roles.

She observed that in books women don't drive cars, although children see their mothers driving all the time. In addition, she noted that although there are women executives, doctors, cab drivers, construction workers, and stockbrokers, women are never pictured in these roles.

Dr. Terry Denny, Professor of Education at the University of Illinois, cited a study substantiating Ms. Shaw's claims conducted by Educational Products Information Exchange (EPIE). The idea for the work stemmed from a publication by Women on Words and Images called *Dick and Jane as Victims* which considered over 2,760 stories from 134 books.

The study revealed a 5:2 ratio of boy-centered stories to girl-centered ones.

"There's no good reason for it," he exclaimed. "Why shouldn't the focus of a story be equal?"

A study of career education materials produced what Dr. Denny referred to as "a volume of sexism." The study showed the same 5:2 ratio.

Although he conceded that researchers found some nonstereotyped materials, Dr. Denny added that sexist language had been eliminated but the treatment of roles had been left the same.

"Overcoming sexist language isn't enough. The image created is what's important," he said.

He quoted the study's findings that the generic "he" was used in 84 percent of the tested materials, 84 percent of the time. The exception to the rule was the use of the generic "she" in reference to secretaries and nurses.

According to Dr. Denny, the study found 4 percent of the materials tested to be nonsuperficial and nonsexist.

As a result of its study, EPIE compiled a checklist and action guide which Dr. Denny assesses as "superb."

A short film entitled "The Fable of He and She" was shown and narrated by Ms. Irma Godlin, Coordinator of the Career Guidance Resource Center in New York City. Illustrating a fictitious separation of men and women, the animated film for youngsters demonstrated the flexibility and adaptability of men and women to each other's roles.

Session 429
Career Education: Women in the World of Work

Karnes Calls Career Education for Gifted and Talented 'Our Challenge and Our Future'

Dr. Frances Karnes, Assistant Professor, Department of Special Education, the University of Southern Mississippi, Hattiesburg, Mississippi, stressed the role of Dr. Sidney P. Marland, Jr. in opening the gates of career education for gifted and talented children.

"Not only did Dr. Marland focus attention on career education for everyone, but he gave renewed vigor to the concept of differentiated education for the gifted and talented, a group that he referred to as the neglected minority," she said. "During Dr. Marland's tenure as United States Commissioner of Education, a Congressional report was published which admitted that Federal efforts to aid the gifted and talented were 'all but nonexistent'."

Dr. Karnes told participants that currently, as a nation, we spend 43 times more on the disadvantaged and underprivileged, and 28 times more on the handicapped, than on the gifted and talented.

Of an estimated four million gifted and talented children of all ages, only one in 20 is clearly identified, according to Dr. Karnes. Of those identified, she said that less than $10 a year is being spent on each in differentiated programs.

As the concept of career education receives wider attention, Dr. Karnes said she believes that educators and laymen will begin to focus their interests on various groups.

"In concentrating on career education for the gifted and talented, let us have a calm understanding of the definition and characteristics of this unique group," she said.

Although over 100 definitions of the gifted and talented are in print, Dr. Karnes indicated that the one currently being used by most educators evolved from a national study and is recorded in the Congressional Report on the Gifted and Talented of 1972.

The definition states:

> Gifted and talented children are those identified by professionally qualified persons who, by virtue of outstanding abilities, are capable of high

performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination: (1) general intellectual ability, (2) specific academic aptitude, (3) creative or productive ability, (4) leadership ability, (5) visual and performing arts, and (6) psychomotor ability.

Dr. Karnes pointed out that this definition is much broader than many previous definitions in the area of the gifted and talented. She also referred to a checklist of characteristics of gifted and talented children used by educators for placement of children in programs according to their needs.

Dr. Karnes noted that model programs in career education for the gifted and talented are relatively nonexistent. In mentioning a few career education programs that are geared toward the gifted student, Dr. Karnes elaborated on the Executive High School Internship Program, directed by Dr. Charlene Hirsch.

"In this program, almost 2,500 gifted and talented juniors and seniors in 26 school districts in 17 States are learning about organizational leadership from the top," explained Dr. Karnes.

The model project at the University of Southern Mississippi, with which Dr. Karnes has been extensively involved, was developed out of a decision three years ago that the university needed to be developing total awareness throughout the State as to the needs of the gifted and talented. Through a Summer Enrichment Program, career exploration has been provided through total involvement of the university.

"All colleges and schools within the university participated through direct involvement of approximately 40 faculty members," she said. "These faculty members were available to discuss high level career choices and to provide hands-on experiences when appropriate."

According to Dr. Karnes, most of the children in the program are from the rural areas around the university.

"None of these children has ever participated in any career education programs and none of them has ever been identified as gifted or talented in any form or way," she said.

As some form of measurement of the program's influence on career choices, the children were asked to list their career choices before and after program participation. A few subjects changed their choices completely and others transformed their decisions from a surface level occupation to a deeper, more involved career.

Tuition for the 4-week program is $100. Dr. Karnes explained that for the disadvantaged child who may not have the money, there are several service organizations that have been "most kind" in contributing to scholarships.

At the Federal level, Dr. Karnes said she believes the best possible source of funding is the Special Projects Act of the Educational Amendments of 1974. She pointed out that some States have State funding in career education, with block grants for model projects. On the local level, Dr. Karnes suggested involvement of community and business entities as possible resources.

"Although the Federal government is in the process of developing a few model projects, little is being undertaken at the State and local level," she averred.

"It is imperative that the State Boards of Career Education and the Education of the Talented and Gifted combine their resources and coordinate their planning so that their total efforts are mutually supportive of the concept of career education for the gifted and talented," she continued.

Dr. Karnes termed these children "a small minority group so critically important to our society that the coordinated efforts at a State level are to bear fruit at the local level."

"Recognition of the contributions that gifted and talented have made to our national development in the past," she concluded, "suggests that in the future, this small segment of the total population may well hold in its hands the destiny of our nation and the total population. Career education for the gifted and talented is our challenge, and our future."

Session 430
Career Education: The Gifted and Talented

Mr. Jack Sappington (standing), Administrator for Special Agents, Orange Unified School District, Orange, California, works with participants on developing a curriculum unit infusing career education into special education programs in a session on Career Education Practices: Special Education.

Illinois Provides Career Education for the Incarcerated

Presenters in this session said that by contracting with local community colleges, the Illinois Department of Corrections provides its institutional residents with a program that will equip them with the skills to plan realistic careers. Planning realistic careers involves the following steps: (1) expanding job knowledge and career route alternatives, (2) narrowing down and choosing career opportunities with the outcome of deciding upon one career path, and (3) planning how to reach the path.

According to Mr. J.D. Ross, Associate Dean for Special Programs, Joliet Community College, Joliet, Illinois, the initial phase of the project provided by Joliet Community College is the career orientation and assessment program. The components of this phase are: exploring existing career areas, becoming aware of the necessary qualifications, developing a realistic plan that can be embarked on while incarcerated, and conducting evaluation and feedback.

To facilitate awareness, Mr. Ross suggested the use of work samples which can be effectively used by residents in a study carrel with video machines that provide necessary instructions. This program also utilizes an occupational inventory examination and filmstrips to examine the values of the residents and to define the relationship of these values to work.

Mr. Ross noted that Joliet Community College also provides instant feedback through a computerized system that lists the available jobs in the county in a particular career field, their requirements, and the salary being offered.

The Human Resources Development Career Counseling Program, Lockport, Illinois, focusing on the soon-to-be-released resident, divides its classes into three sections, said Mr. Edward Johnson, Project Director.

The first section of classes deals with the expansion of job knowledge and career route alternatives. The students learn about a variety of jobs and their related requirements, and select interest areas and educational level goals.

During the second section of classes, each client explores, defines, and prioritizes his/her values, interests, and abilities and selects three corresponding jobs. At the end of this section, the client narrows down her/his job alternatives to one choice.

In the third section, the participant plans a strategy for attaining goals, including setting short- and long-range goals and developing timeframes for achieving them.

Mr. Johnson said that after the career choice portion of the program, the clients prepare themselves for job-seeking by identifying potential employees in their geographic areas, compiling resumes, developing and sending letters to prospective employers, and learning and practicing effective job interviewing techniques.

Included in the career plan for students leaving the institution is a survival plan outlining alternative courses of action in case the initial plans need to be changed or delayed. Living, learning, and working resources such as emergency medical care, clothing, housing, and financial assistance are defined by the parolee. This special segment of the career plan addresses itself to what Mr. Johnson referred to as the most critical period after release—the first 90 to 120 days, depending on the circumstances.

Session 431
Career Education for the Incarcerated

Mrs. Emma Gamble, Director, Career Guidance Institute, Toledo, Ohio, in a session on The National Alliance of Businessmen in Career Education.

Ms. Carolyn O'Keefe, Editor, Gregg/McGraw-Hill, New York, N.Y., in a session on Career Education Practices: Middle/Junior High School.

'Artasia' and 'Foresee' Expose Students to Career Options

Mr. Edward Truman (standing), Assistant to the President, Musicians' Union, Local 47, American Federation of Musicians, AFL-CIO, Hollywood, California, gestures toward Mr. F. Wayne Crew (seated in foreground), Manager, Computerized Career Counseling Center, Inc., Kingsburg, California, in a session on Labor Unions in Career Education.

Explaining the American Federation of Musicians' involvement in California's career education, Mr. Edward Truman, Assistant to the President, Musicians' Union Local 47, Hollywood, California, and Mr. Wayne Crew, Manager of Computerized Career Counseling Center, Inc., illustrated the union's interest in education.

In a session entitled Labor Unions in Career Education, they described the Artasia and Quest programs, coordinated by Mr. Truman, and Foresee, a computerized career counseling aid.

"We found that often music students are encouraged for several years," Mr. Truman began, "but they don't know to what end."

He described Artasia as a program sponsored by the American Federation of Musicians to help the student find career options and to acquaint the student with the business of art.

Each spring on high school campuses the union sponsors speakers from different arts who talk about the business aspect of art, he said.

Singers, writers, and actors talk of their experiences in their field and how they manage as business persons.

"Quest is similar to Artasia," he explained, "but it is directed toward the faculty instead of the student."

According to Mr. Truman, Artasia and Quest are grass-roots programs.

"We let the program be organized from the bottom up. The students do the nitty-gritty of advertising the program and getting people involved," he said.

Mr. Truman mentioned that the union lets the educators do most of the work, so that they can learn something from doing it.

Next, Mr. Crew described Foresee, a program designed to aid students in making career decisions.

"The program began when I realized that several of my students had no idea of what they were going to do with their diplomas," Mr. Crew, who taught at Fresno University, said.

Foresee is a fully computerized program in which the student fills out a worksheet and computers match his/her interest and ability levels.

"Since 50 percent of students say their primary advisor in career determination is their parents," Mr. Crew said, "we give our findings to the parents and then to the teachers and counselors."

Once a student finds his aptitude/interest rate, Mr. Crew explained, he or she has more direction in seeking a career option.

"Most students are unprepared mentally, physically, emotionally, and spiritually to leave the university and get into the business world," he added. "With a combination of advisors, the students can make better decisions."

The musicians' unions are interested in education, Mr. Truman explained, because now most symphonies import foreigners to play. The unions want to develop American talent and have American stocked symphonies.

He said that already unions sponsor a Congress of Strings, which is a summer program to develop students' musical talent.

Session 432
Labor Unions in Career Education

Barton Says Career Education Should Be Lifelong Process

The development of an education/work policy which would serve people throughout their lifetime is a concern of Dr. Paul Barton, Senior Consultant for the National Manpower Institute, Washington, D.C. Cooperation among business, industry, education, and private citizens could provide career education opportunities for people of all ages, he said.

"The danger of locking people into time-traps which prevent them from breaking out of traditional molds forced on them by society must be eliminated," Dr. Barton said.

Dr. Barton commented that traditionally, three periods of social development (as far as work/career are concerned) have existed: youth-education, adult-work, and old age-retirement. He disparaged classification of age groups in this manner and said that doing so deprives youth of work experience, adults of education, and older adults of both work and education. Dr. Barton said he feels this can be avoided by a comprehensive manpower policy relating to career education.

According to Dr. Barton, career education should offer lifetime career education opportunities. These opportunities need to begin in the schools with career awareness, occupational information, work experience programs, and placement services. For the adult, educational opportunities, training, and retraining should be made available. Retirees should be given the option of retraining for a second career, either paid or unpaid, or should be helped to make a smooth transition to a leisure life, he said.

Dr. Barton expressed some concern regarding the future of career education. He said that some child labor laws are misunderstood and recommended their clarification. He also said that some school system regulations prevent career education from being fully incorporated into the curriculum. He warned against the danger of preparing students for jobs that may not be available when they graduate. He recommended modification of some unemployment practices, advocating that stipends be provided to allow the unemployed to retrain while they are job hunting. Currently, unemployment insurance laws require a person to be available for employment, thereby making involvement in a training program a difficulty, and in many cases, an impossible undertaking, he noted.

Dr. Barton also advocated counter-cyclical training to avoid the loss of manpower due to layoffs or job obsolescence. Commenting that people can be trained for jobs that will be available in the future, he noted that in some European countries governments pay firms to train their employees for other jobs rather than lay them off.

Dr. Barton told participants that the National Manpower Institute is a private, nonprofit organization, primarily concerned with human resource development. It provides training programs and work experience programs for the underprivileged, disadvantaged, and poor. According to Dr. Barton, its goals and those of career education are compatible. He stated that while the definition of career education is still evolving, so is the definition of manpower. That definition, he said, must be expanded to include all levels of education.

Session 434
Career Education and a National Manpower Policy

Utah Schools Provide Examples of Infusion Techniques

"We're talking about increasing boys' and girls' awareness of themselves, others, and the world of work by helping schools bring the world of work to the classroom," said Dr. Ray D. Warner, Director of Career Education for the Nebo, Utah School District.

In a session on Curriculum-Infusion Approaches to Career Education, Dr. Warner provided several examples of infusion carried out in his district.

"For example, after studying the pinhole camera in science, the class may have a visit from a professional photographer. After his appearance, the students may know more about his work," he said.

Dr. Warner noted that his school district staff has studied the elementary school curriculum carefully and infused career education into the subjects usually taught.

Ms. DeOn Jensen, Career Education Specialist, Utah State Board of Education, Salt Lake City, commented that the schools often use career education resources from students' own families. For example, if a student's father happens to be a fireman, he may be invited to visit the class, she said.

Local business is also involved in career education in Utah. In one school, a local automobile dealer agreed to set up an exhibit of parts in the school.

Dr. Warner advised participants, "You can have these things; just ask for them. The parents will do anything for you."

Mr. Wayne Childs, a third grade teacher at Westside Elementary School in Springville, Utah, noted that one career education activity used in his class is organization of a corporation for which students elect a board of directors among themselves.

Mr. Childs described the process in a filmstrip shown during the session.

Relating that the third grade students needed books for their classroom library and there was no money available, he said that the class discussed the problem and decided that the best solution was to hold a candy sale.

With career education in mind, Mr. Childs suggested that the class form a corporation. He asked an attorney to visit the class to explain the workings of such an organization and to help the stu-

dents later in drawing up articles of incorporation.

The next step was a visit to the notary public, who, in addition to notarizing, explained his job to the class. Next, stock was distributed, officers were elected, and the "plan of attack" was devised.

Mr. Childs stated that the children decided to do business with World's Finest Chocolate; they marketed the candy after placing ads in the school newspaper. While selling the candy, the students recorded transactions and kept track of profits. Finally, the students decided on books.

"The immediate goal was, of course, to be able to have library books, but in doing this, students were able to understand further the world of work," Mr. Childs said.

Dr. Warner summed the session up by commenting, "We're not teaching kindergarten kids to be surgeons, but we are showing them that there are surgeons. While the students will not set up their own hospital, they will nonetheless be exposed to almost all fields in the world of work."

Session 435
Curriculum-Infusion Approaches to Career Education (Grades K-12)

Simulation Activities Compensate for Lack of Resource People in Rural New York

Allegany County, New York, is composed of several small rural school districts which saw a need for simulation activities in the schools because of the lack of available resource people in business and industry.

Ms. Pam Serio, Career Education Coordinator for Allegany County public schools, described simulation as "not all of reality, just the important parts; simulation accentuates reality and helps the child see what the real world is like."

In one simulation activity in the county, Ms. Lynn Griffith's kindergarten class at Andover Central School, Andover, New York, created a simulated lollipop factory, complete with a factory manager, a head chef, and numerous other chefs who performed such jobs as measuring, pouring, stirring, and mixing. A tester was needed to be sure the mixture was just right. Another chef was needed to add the sticks and move them on to the wrappers. An inspector was needed to guarantee quality control.

According to Ms. Griffith, "The main objective of the simulation activity was to teach basic economic awareness, organizational skills, and worker responsibilities." She noted that she felt the most important lesson learned was the importance of working together.

"When a child got tired and decided to leave the assembly line, the class realized the lollipop factory could not operate without each person performing her/his assigned task," she commented.

At Belfast Central School in Belfast, New York, teacher David Porter has set up a mini-society in his fourth grade class.

One objective Mr. Porter established for the mini-society is economic awareness, whereby students experience directly such economic phenomena as money scarcity, monopoly, competition, supply and demand, and opportunity cost.

Mr. Porter related that his students learn to deal successfully with a bank by learning to write and endorse a check correctly, balance and manage a checking account, and figure interest earned on a savings account and interest paid in borrowing money.

He stated that another objective in the mini-society is career awareness, whereby students gain an understanding of careers available to them by directly experiencing some of them. He said that students deal directly with goods and services by setting up their own businesses, and they employ and are employed by other students.

Mr. Porter said, "I want to prepare kids to live in the real world and to be able to cope with the many problems the real world offers."

Session 436
Simulation Techniques in Career Education

'Bread and Butterflies' Introduces Youngsters to Real-Life Work Experiences

"We've come a long way since public education began over 100 years ago in America," Mr. O. Max Wilson, Director of Instructional Resources, Georgia Department of Education, Atlanta, Georgia, said. "We've got many educational tools now, including instructional TV."

Mr. Wilson and Mr. Bill Perrin, Director of Field Services, the Agency for Instructional Television, Bloomington, Indiana, described their collaborative effort known as "Bread and Butterflies," a television program introducing young people to real-life work experience from the young person's perspective.

The program was created by the two men, with the aid of a consortium of educators, educational agencies, and television production experts. The program grew out of increasingly widespread dissatisfaction with the majority of contemporary educational techniques. The group met throughout 1973 to discuss effective countermeasures to such problems as high dropout rates, inability to relate schoolwork to the real world, and the overrated status of college. Each group working on the project contributed money to it.

Mr. Wilson noted that a curriculum design team developed the following main goals for the program:

1. Positive self-concept
2. Objective self-review

3. Demonstration of personal relation skills
4. Respect for others and work
5. Self-in-work options
6. Responsibility
7. Control of own life
8. Relation of current experiences to work
9. Self-in-work concept
10. Interrelation of classwork

The lesson themes included self-clarification, responsibility, destiny, success in school, people at work, what is success, our economic system, why work, interdependence of work and school, human dignity, and lifestyle choice. Twenty-seven agencies reviewed this work.

For the production design, the design team members were aided by Hampton Roads Public TV, Instructional Media Division, Utah Department of Education. Technical advice (such as the decision to use videotape) was provided by the Agency for Instructional Television. After completion 34 agencies provided finances.

According to Mr. Perrin, over three million students have seen the program so far, and in general, their comments have been highly favorable.

"Teachers themselves have said that students learn about decision-making and how to use it in their lives," he said. "The shows provide positive role models and are open-ended to provide a trigger for discussion."

Mr. Wilson commented, "We'd been talking about effective career education implementation in Georgia for a long time. But we always complained about having poor materials. With 'Bread and Butterflies', we get good materials."

He stated that the University of Georgia helped to train regional educators, who in turn aided the local administrators and teachers. He added that an 8-station network provided the hookup for a fourth and fifth grade audience of 99,000 students. Most kids have seen the show either broadcast or on film.

Georgia's experience, he concluded, has been almost universally acclaimed as positive. Of the 155 teachers surveyed, all agreed that the program should become part of the regular curriculum. Most also felt that greater training was needed to make teacher usage more effective, he said.

Session 439
Using Television to Implement Career Education

Hawaii Develops Manual for Teachers as Career Advisors

Dr. Richard White, Career Counselor at Leeward Community College in Hawaii, outlined the manual that Hawaii is developing to aid teachers in career education at secondary schools and community colleges.

Dr. White said that the manual, called *The Teacher As a Career Advisor*, is put out by the Office of the State Director for Vocational Education.

Noting that the manual emphasized the team concept, he said that Hawaii would like to see entire school staff participation in career education.

"Constant reference should be made to the people, resources, and ongoing programs already established in career development in your school," Dr. White told participants.

Three phases of the manual were outlined by Dr. White. He explained that Phase I emphasizes school and community teamwork with the hope of incorporating career education concepts into the classroom. He urged teachers to stay informed about the job market and know the job resources available today, and suggested that joint workshops be held for a few hours each month to encourage school-community cooperation.

Dr. White described Phase II of the manual as the actual program development in each school, the teaching of decision-making processes, and the sharing of information on career education and relevant experiences with students.

He said that Phase III involves the use of inventories and tests to understand the student's rationale for seeking certain jobs within the context of his/her career lifeline. Suggestions on creative job searches, applications, resumes, and interviews for students are also part of the third phase.

He encouraged teachers to use a humanistic approach with their students and said that students appreciate teachers' sharing their own reactions to their first job experiences.

"In effect," said Dr. White, "this manual is designed to provide a program for teachers and principals to implement career education in each school. *The Teacher As a Career Advisor* is brief and informal, and tied in with the resources of the area. We hope to use this advisory manual in training with high schools and colleges."

Session 440
Teacher Advisor System in Career Education

Rockford Creates Teacher-Built Career Education Program

Five years ago, the schools of Rockford, Michigan, asked themselves, "How well are we preparing students to leave high school?"

Their answer led to the creation of a solid, community-based, teacher-built career education program.

Rockford, Michigan, a suburb of Grand Rapids, is a small school district, comprising 4,200 students, with modest finances to match. The career education program developed there involves teachers, board members, and administrators. From its beginning it has not relied upon, or hoped for, Federal money.

Mr. Arthur Miller, Assistant Superintendent for Instruction of Rockford's Public Schools, described the inception and development of its career education program.

"First the program was written for a 3-year period. To do this, a committee was formed of the best teachers in the school system. They contacted Michigan State University for a workshop on career edu-

cation, which gave them the theory for the program," he began.

Mr. Miller explained that goals adopted were those from Education Properties, Inc. of Irving, California. These were developed K-8 with the committee of teachers, who also created Rockford's career education model, he said.

"Remember," said Mr. Miller, "this was five years ago; there were not many models around, or anything to copy."

The teacher-written, teacher-developed, and teacher-evaluated model that evolved in the Rockford public schools used the unit approach on the elementary level. All units include hands-on activities, role playing, field trips when needed, all-subject tie-in, and resource people.

Mr. Miller said that evaluation was accomplished by testing at the end of grades 3 and 6. This was based upon the performance objectives of Rockford's own plan, plus the State of Michigan career development goals.

According to Mr. Miller, eighth grade students spend an hour each week on values clarification, addressing such questions as: Why am I interested in this? Why am I not interested in that? Why do I think the way I do?

"Values and attitudes are a natural thing to discuss when you talk to children about themselves," Mr. Miller observed.

He noted that students are again evaluated at the end of the eighth grade.

Mr. Miller stated that junior high students have a career day once a year when many different types of workers come to the school and talk to them.

"Students seem to prefer the 'industry-type' workers; the truck driver was the 'star' last career day," he said.

He also mentioned that specific junior high departments do some career education on their own.

Senior high students have a career education room in their media center. Mr. Miller noted that its use is increasing; two years ago, 35 teachers used the room, while last year 52 teachers used it. He added that high on the list of senior high objectives is an occupational internship program.

Mr. Miller said that the Rockford public schools are heading toward development of career education goals and a model for senior high school. As in the development of the elementary model, a committee of teachers has been selected to work on this.

According to Mr. Miller, central to the Rockford program is a continuing teacher information effort. Several times a year, a teacher newsletter is published which reports on individual career education work being done by teachers and other career education items.

He said that further input into the program comes from an advisory council, composed of businessmen, teachers, students, parents, and administrators.

Session 443
Competency-Based Career Education

Detroit Program Applies Course Content to Realistic Situations

Dr. George E. Leonard, Professor, Guidance and Counseling, Wayne State University, Detroit, Michigan, described career education as "a process by which an individual is assisted in making decisions involving the total human being."

Dr. Leonard presented an ecological model for career education developed in Detroit. He noted that in an effort to provide a type of unlimited program utilizing human resources, the "logical step" was to include environmental resources such as the 200 industrial firms in Detroit.

According to Dr. Leonard, there are four components of the program, which has been funded by a Title I grant: the school develops a career guidance team; exposure to the community and working world helps children to adjust socially; tours are made to the industrial firms of Detroit; and other resources such as ministers and politicians are utilized.

Dr. Felix R. Sloan, Director, Career Guidance Project, Detroit Public School District, said he believes that ". . .the staff in a school do not have separate roles, but must collectively work together to coordinate all activities for only one purpose—to help kids."

Dr. Sloan described the Detroit program as a kindergarten to twelfth grade process to help children apply their courses to realistic situations.

He noted that a student employment service provides "on-campus" jobs to second graders who fill out the simplified application/questionnaire form. The forms are given to the English teachers who explain any errors in grammar to the students.

"This gives an opportunity to see how English skills are applied to real situations," Dr. Sloan said, adding that sixth graders do the hiring and learn interviewing techniques and procedures.

Dr. Sloan told participants that elementary schools have a student banking unit on campus open twice daily. Students may open savings accounts and be granted loans, following the procedures of a professional bank. This experience shows the relationship of mathematics to an occupation.

He mentioned that students are allowed to go on a minimum of 20 tours a year to local industries and businesses. Parent participation is strongly encouraged on such tours, he said.

"In 1972 the Career Advisory Committee conducted a study of over 2,000 career programs in the United States in an effort to identify the 15 most comprehensive programs. The committee only found 13 programs they considered to be comprehensive and the ecological program was rated one of the top three," Dr. Sloan related.

Dr. Sloan concluded by saying that this program aims at helping students adjust to practical situations of their lives.

"We strive for students to become free," he said.

Session 447
Career Education: Human Services Movement

Florida Educators Describe EPIC Program

Mr. John Bailey, Assistant Director of Educational Progress In Careers (EPIC), Tallahassee, Florida, and Mr. Bill Ripley, Program Coordinator of the Office of Career Education for the Orange County School Board, Orlando, Florida, told participants in a session on Needs Assessment Procedures in Career Education about the EPIC program.

Mr. Ripley said, "EPIC was founded by the chairman of the educational committee of the Florida Council of 100, a group of Florida business leaders who act as advisors to the governor."

Mr. Ripley stated that EPIC's purposes are (1) "to help Florida's public education system better prepare children for life in the real economic world through a greater involvement with leaders from business, labor, and professional groups, and parents, and (2) to develop and validate an evaluation system for collecting data in career, economic, and community education from students, staff, administrators, and parents."

There are nine components of EPIC, Mr. Ripley told participants. These include:

1. Knowledge of the economic system. Students and teachers should understand the workings of the free enterprise system, so that students become aware that society is offering them an opportunity to prepare for a career and to provide for themselves, he said.
2. Knowledge of occupations. Mr. Ripley commented that students should be encouraged to review labor market information on available careers and to explore a variety of different work situations.
3. Guidance for realistic career decisions. He noted that students should be encouraged to plan systematically for a career and become better prepared to make career choices, in terms of their own interests, abilities, achievements, and limitations.
4. Employment-entry skills. Mr. Ripley said that students should be provided with hands-on experiences which emphasize how academic and vocational skills are used in the working world.
5. Alternatives for potential early school leavers. According to Mr. Ripley, potential early school leavers should be encouraged to enter programs which develop skills in basic reading, communications, computation, career exploration, and job acquisition and retention.
6. Student-worker contacts. He said that students should be provided opportunities to make contact with all levels of working adults throughout the community to determine their interests before choosing specific careers and related lifestyles.
7. Placement and follow-up. Mr. Ripley mentioned that before leaving school, students should be given the opportunity of employment or some other appropriate placement, such as higher education, through placement/follow-up systems with qualified staff.
8. Staff development. He urged that all administrators and staff receive in-service training using career and economic education strategies.
9. Community involvement. Community members should be involved in the planning, implementation, and evaluation of educational programs, according to Mr. Ripley.

Another feature of EPIC that Mr. Ripley described is its instrument battery, consisting of 24 forms. These are used to collect test results from students and corresponding data from teachers, administrators, and parents on dimensions of career, economic, and community education.

Mr. Bailey asserted that the EPIC battery is unique in that it involves the community and noted that 13 separate professions in Florida critiqued the EPIC battery regarding its content validity for information applying to each profession.

He revealed that EPIC material may be published soon on a nationwide basis. Currently, it is available only on the State level.

Session 449
Needs Assessment Procedures in Career Education

Bowen Says Career Education is Working in Prince George's County, Maryland

Tests and evaluations show that the career education program in Prince George's County public schools, Upper Marlboro, Maryland, is working and improving students' skills and attitudes, according to Dr. Lee Bowen, Supervisor of Career Education for the system.

"Tests show that boys and girls at the elementary level know more about jobs, students' attitudes have changed, attention spans are better, and reading and math skills have improved appreciably since these subjects have been integrated into the career education program," Dr. Bowen said.

"We are still weak in giving hands-on experiences to elementary kids and we need to increase nontraditional sex role choices," Ms. Theresa Gushee, Pre-Vocational Coordinator, said, "but we are working on these areas. There is a big increase in students making choices based on facts, using teachers and counselors as resources, rather than parents," she noted.

Dr. N. Edwin Crawford, Director of Career Education, stated, "I am proud of and confident about our program for several reasons:

1. We have expanded our programs 500 percent and our budget and staff by 300 percent in five years.
2. Evaluation and program data speak for themselves; we have been able to implement the theories we wrote.
3. We made a difference in the total instructional program in the county.
4. We have testified in Congress several times regarding career education.
5. We have produced numerous documents from the program, which are available by writing to us.
6. We have developed a comprehensive 5-year plan of which numerous evaluation studies have been conducted."

Dr. Crawford explained that to do this, financial support was needed which was consistent with the magnitude of the program in operation.

Ninety-seven percent of this year's departmental budget comes from the county. The rest comes from the Federal government, through the State Department of Education; from special funds for summer skills training programs and apprenticeships; from State Department of Education, Division of Instruction funds; and from grants.

"Community support, the advice and expertise of experts from the State Department of Education, new approaches to using the money available, and excellent staff have made this possible," Dr. Crawford added.

Prince George's school system, a large urban K-12 district with 150,000 students (the tenth largest district in the nation), has programs for all grade levels and conforms to the 15 occupational clusters identified by the U.S. Office of Education.

In grades K-6, career awareness is stressed; grades 6-9—career exploration; grades 10-12—college preparation, pre-technical education, and vocational education; grades 12 and beyond—adult continuing education, technical education, and college.

"Career education is not a separate block; it is infused into the curriculum," Dr. Crawford explained. "Students use math and reading in practical application."

"The business community takes time with us and with students," he continued. "Since we are near many governmental complexes, this provides many opportunities. People from the performing arts, fashion, communications, law enforcement, and many other areas come into the classroom. We utilize senior citizens and parents."

Ms. Gushee and Mr. Ray Zimmerman, Career Development Coordinator, outlined the educational goals and counseling roles at the elementary, junior, and senior high school levels.

The grades kindergarten through six are in the period of career awareness, Ms. Gushee said.

"We want our kids, at the end of sixth grade, to deliver skills in basic arithmetic and reading which are developed around related occupational skills. We asked representatives of industry what they wanted students to learn and they told us reading, language arts, oral communication, skills in persuasion, inspiration, fact finding, and description—all transferable skills from the classroom to work. We also spend extensive time on measurement and estimation skills in math, which are also wanted by industry. Sixth graders should be able to recognize characteristics of various occupations. Through practical classroom experience, they should be able to answer questions like: Do I like to work outside? Do I like to use gross or small motor skills? Do I like to get dirty? Do I like to work as part of a team?" she said.

Counselors work with small groups of youngsters at this level, Mr. Zimmerman explained, and reorient them to think of "work" as a good word.

Students have some hands-on experiences at this level; they also spend a day shadowing mothers or fathers on the job and writing follow-up reports about it.

At the junior high career exploration level, seventh and eighth graders are exposed to research and exploration in all 15 clusters.

"By the end of the ninth grade, we want them to be able to discuss occupation entry-level jobs; education and training requirements; and the interdependence of workers in the home, school, local business, and industrial community," Ms. Gushee said. "We want students to develop transferable, employable habits—punctuality, good attendance, completing a task," she added.

"Ninth graders should be able to assess themselves, their needs, abilities, interests, aptitudes, and achievements. By this time they have had four batteries of the Iowa Test of Basic Skills and two batteries of interest inventories and aptitude tests, so they have a

profile," she said.

Mr. Zimmerman noted that counselors work with students on decision-making skills and help teachers administer and interpret the various inventories. They also give students private interpretation.

Seventh grade students are taught how to apply for a social security card, and ninth graders go through the complicated procedure of applying for a work permit.

By the end of the ninth grade, students must have a vocational or educational plan and will prepare an education worksheet (a 4-year high school course plan) and begin preparing job resumes.

Mrs. Sallie M. Fitts, Supervisor of Business Education, explained several of the specialized areas that tenth through twelfth graders can go into at the high school level.

"We have several main areas high school students can get into," Mrs. Fitts said. "These include office experience, vocational education, distributive education, and professional training (a career program for college-bound students). We also have a job placement center. Because we are near the Washington, D.C. area, we can place all of our students after graduation."

The vocational education areas include distributive education, technical education, consumer education/home economics, office occupations, agriculture/horticulture, health occupations, trade and industrial education, communications and media, and construction and transportation.

According to Mrs. Fitts, students in the business education program have several occupational options to choose from: general office, clerk, stenographer, or data processing. Home economics students may study parenting, housing, food and nutrition, crafts, textiles, clothing, consumer education, material design, or child development.

Students at the high school make use of the career resource center in the library, Mr. Zimmerman explained.

"This is the biggest component in providing information to students. It contains a computer which provides, via a printout or on a screen, lists of 4- and 2-year colleges, information on occupational fields and related occupations, and data on scholarships and financial aid available," he said.

A career education contact person is in each high school working with the teachers to help them implement the program in the classrooms, Mr. Zimmerman added. Materials and in-service training are available to aid the teachers.

Session 452
Career Education Practices: Large Urban K-12 Settings

Plethora of Community Resources Available to Career Education

Mr. William Weisgerber, Director of Career Education, Michigan State Department of Education, Lansing, Michigan, in a session on Community Resources for Career Education.

What resources are available in your community? Take a look and you will find organizations such as Delta Sigma Theta (DST), the American Legion, the National School Volunteers Program (NSVP), 70001 Limited, the Girl Scouts of the USA (GSUSA), the Boy Scouts of America (BSA), the Women's American Organization for Rehabilitation and Training (ORT), and Junior Achievement (JA). These eight organizations were represented at a session on Community Resources for Career Education.

Ms. Constance Clayton, the Executive Director of Early Childhood in the Philadelphia School District, and President of DST, outlined several career education-oriented DST programs. She mentioned that the DST has inaugurated programs to help people get the most out of their career choices. The group operates job opportunity clinics employing 45 consultants to discuss available jobs with people. Role models are used as identifiers. DST's College Alert Workshops program teaches youth how to deal with the college experience. Triple S (Saturday Study Session) provides extensive counseling services. Delta Team Lift aids in career motivation by taking students on field trips. The health careers project is encouraging teachers and counselors to inform students, particularly minorities, about the availability of jobs in the health field.

Ms. Clayton went on to enumerate several more programs Delta Sigma Theta is operating. The Delta

Resource Bank is a job referral program; Direct Search for Talent recruits 15- to 19-year-olds and encourages them to continue their education; Life Development Centers coordinate community activities.

Delta Sigma Theta is heavily involved in helping young people and has given seed money to other, outside projects in addition to its own projects. Ms. Clayton said she feels there is a need for a communications network to take advantage of the resources available in every community.

According to Mr. Ronald Murphy, National Executive Committeeman, American Legion, Glendale, Arizona, the American Legion is also currently involved in career education in several ways. In connection with its work with schools and youth groups, the Legion distributes "Need a Lift," a directory of total Legion resources, and the career assistance program provides direct work experience to people as observers or trainees. The American Legion coordinates its programs with concerned community groups.

Dr. Audrey Jackson, President of the National School Volunteers Program, Alexandria, Virginia, said that volunteers make a difference in that they create a partnership between schools and community. The NSVP has established a tutorial program because "students achieve better with tutors." Its Step Into Business program uses the "job approach" to obtain firsthand knowledge about business opportunities.

The firm known as 70001, Ltd., Newark, Delaware, is designed to help high school dropouts obtain employment in sales and related fields. Mr. Ken Smith, President of the company, mentioned that one reason business backs this program is a 49 percent annual turnover rate in retail sales personnel.

There are 19 existing 70001 programs in eight States, and all seem to be successful. The goals of the company are to enhance employability, and to teach survival skills in a context of total character development. 70001 awards completion certificates, but also encourages its enrollees to pursue a GED certificate.

Over two and one-half million Girl Scouts were represented by their President, Dr. Gloria Scott.

"The Girl Scouts of the USA try to build fulfilled young women," she said. "Schools do not do the entire job."

She noted that career education has been a part of Girl Scouting for a long time. Girls are encouraged to choose careers in areas that interest them and not to limit themselves to traditional roles.

"Because females are frequently poorly prepared to choose careers effectively, the GSUSA has started a career awareness project based on long-term career education for 12- to 17-year-olds," she said.

Dr. Scott emphasized the need for young people to become more aware of the world around them and to examine their own feelings and inclinations.

Next, Dr. Ivan Stafford, Project Director, Finance Development Division of the Boy Scouts of America, stated, "Scouting is very involved with the spiritual, physical, and mental well-being of people."

He went on to say that there is a "need to raise the levels of awareness of the resources of scouting." He also mentioned that efforts are being made at the national level to infuse scouting into the school system.

According to Dr. Stafford, scouting has been involved with career education since 1911. He said he feels there is a need to raise the visibility of career education and that scouting should be a part of this.

The Women's American Organization for Rehabilitation and Training (ORT) is a voluntary organization based on the fact that people have an appreciation of and a desire for work.

As Ms. Bea Forrest, Vice President of ORT, put it, "We took a look at what was going on and decided to democratize the educational 'caste' system."

ORT members are advocates of vocational education and have as their goal improving the quality of education. Members of ORT have served on State, national, and local advisory councils; appeared on TV shows; written letters to newspapers; campaigned for the Perkins Bill; provided testimony at State hearings on vocational education; supported bond referenda; made presentations to career education supervisors; and initiated career awareness programs, as part of many activities directed at furthering their stated goals.

The final presenter, Ms. Julia Hubbard, Treasurer of the New York Regional Council of Industries, Junior Achievement, briefly described JA's programs. In the high school program, students form and run their own company. She commented that this gives students real experience with the free enterprise system. The JA's junior high school program uses business people in the classroom to demonstrate the job experience. College students participate in an advisory role, monitored by business representatives, in helping high school companies achieve successful experiences in the world of business endeavor.

Junior Achievement is established in 250 cities in the U.S. and has extended its programs to seven other countries. Ms. Hubbard said she is convinced that Junior Achievement has a great deal to offer both young people and business alike, through its extensive network of contacts in the business community and in the schools.

In general, presenters agreed that community organizations provide excellent resources for career education. They encouraged participants to explore all possible means of working with such organizations to foster development of career awareness, self-awareness, career exploration, and career decision-making.

Session 501
Community Resources for Career Education

Some of the participants in a session on Community Resources for Career Education.

Post-Secondary Education Fulfills Promise of Career Education

From left, Mr. Ralph C. Porter, Professor, and Associate Director of the National Commission for Cooperative Education, Boston, Mass.; Dr. Ernest A. Dow, President, National Association of Black Adult Educators, Washington, D.C.; Dr. Jerome F. Weynand, President of the Colleges, San Antonio Union-Junior College District, San Antonio, Texas; and Dr. Alva C. Cooper, Staff Consultant for Professional Development, College Placement Council, Inc., Bethlehem, Pennsylvania.

At a panel session on The Promise and Potential for Career Education in Post-Secondary Education, chairperson Dr. Frank Hubert, Dean of the College of Education at Texas A&M University, spoke primarily to the premise that post-secondary education has, to a substantial degree, fulfilled the promise and expressed the potential of career education already. Other panelists included Dr. Granville Sawyer, President of the American Council on Education; Dr. Jerome F. Weynand, President of San Antonio Junior College; Dr. Alva Cooper, Staff Consultant, College Placement Council (and Professor Emeritus, Hunter College); Mr. Ralph C. Porter, Associate Director of the National Commission for Cooperative Education; and Dr. Ernest Dow, President, National Association of Black Adult Educators.

After some opening remarks, the chair introduced Dr. Sawyer who spoke from his experience as a university president, and as a black man. He spoke of the struggle for recognition and the attention that must be paid to minorities by career educators. Dr. Sawyer described specific, positive steps undertaken while he was president of a university. Noting that his institution views the community at large as a school, he told participants that his institution has established a week-end college, and a chair of career education. Staff and faculty act as role models in the world of work.

Speaking on the status of minority people in the United States, he said, "Minority people are part and parcel of community and urban affairs. They are inheriting the cities. Employers focus on the presence of minorities on the job, not on their accomplishments."

Remarking that it is only logical that the educative process must become realistic and responsible, or lose its function in society, he continued, "I have seen the sacrifice of education to economic order."

He concluded his presentation by endorsing the promise of career education in post-secondary education.

Dr. Weynand was the next speaker. After opening with a quote from Senator Sam Irvin, "The search for truth is the paramount issue," he went on to say that although career education has a societal impact far beyond busing, it is not a household word, at least not in Texas.

"The myth still persists that career education is vocational education," he said. "I looked in our own institutions, and in the educational community at large. We've got career education, but we don't know it well enough to flaunt it."

He urged his listeners to look at their own institutions to find career education by another name.

As a representative of the American Association of Community and Junior Colleges (AACJC), Dr. Weynand described some of its projects.

The AACJC has Advisory Committees in pre-med, pre-law, and pharmacology which conduct field trips and seminars as well as an Advisory Committee for Occupational Education and Technology. It also conducts seminars and workshops in the fields of nursing, allied health professions, and recreational leadership.

The AACJC also provides counselors who go out into the community, hold open houses, and invite business and industry representatives to come and speak to students. Placement and follow-up services are provided. Feedback is a key component of this effort.

Dr. Weynand stressed the importance that the AACJC places on continuing education, job-related education, and the utilization of skill centers at which attitudinal workshops are conducted using closed circuit TV. Finally, he mentioned the graduate student internship program, which helps prepare the graduate for entry into the job market.

From left, Dr. Granville Sawyer, Board of Directors, American Council on Education, Houston, Texas; Dr. Frank Hubert, Dean, College of Education, Texas A&M University, College Station, Texas; and Mrs. Suzy Terral, Career Education Coordinator, Region VI Education Service Center, Huntsville, Texas.

He summarized the AACJC position as follows: "The junior or community college system is resilient, home-owned. It offers salable skills and a good general education. . . .We believe in education with a purpose, in placing people where the jobs are."

Dr. Alva Cooper, the next panelist, began by quoting some "sad statistics" that, of the 18 percent unemployed college graduates, about 40 percent majored in the humanities or social sciences.

"In the best case, however," she said, "All students are going to be in trouble, either unemployed or underemployed."

She referenced a 1974 survey of 1,915 employers which showed that 76 percent of the employers filled less than 10 percent of open job slots with liberal arts graduates. The feeling was that if these graduates had taken business-related or cooperative education courses, more would have been hired.

"I am making no attempt to downgrade the liberal arts," she said. "They are truly valuable; but liberal arts students need flexibility, as well as knowledge of what options are available and how to prepare for these."

A critical aspect of the career education concept, according to Dr. Cooper, is to work with students in a context of reality to develop individual goals. Students should be made aware of the necessity for career planning early in their college program, she averred.

"Students are not sure of what to do, or where they can go. There are no adequate role models. This demonstrates a real need for colleges to provide career counseling services, no later than late in the freshman year," she emphasized.

Proposing a voluntary certification program to upgrade counseling services, she stressed the need to develop models for career counseling and cautioned against the tendency to push students into choosing careers too early.

"The goals are the education of the whole person, the setting of short- and long-term goals, and the learning of decision-making skills," she said.

Dr. Cooper was followed by Mr. Ralph Porter, representing Post-Secondary Cooperative Education (PSCE). Mr. Porter defined PSCE as different from vocational education and others and noted that PSCE takes a responsibility for work experience.

"Work must be related to what the student is studying," he said, "and the school assumes the responsibility for melding work experiences into academic studies."

He highlighted the need for PSCE by relating that 85 percent of students completing post-secondary education are employed, but only 13 to 15 percent of the jobs held relate to what was studied in school.

Proposing that school calendars be changed to allow schooling to alternate with work, he noted that many schools have some type of optional work/study plan whereby students may select from a number of experimental programs.

Rapid expansion of cooperative education courses has had an impact on career development. Mr. Porter stated that important outcomes are provided by a cooperative education model.

"The findings show that more than 75 percent of former cooperative education students said that work experience had an impact on career choice," he said.

Lauding cooperative education's success, he noted that a high percentage of cooperative education students received adequate career information, were well informed about job opportunities and were better prepared to enter job markets. He found that the most beneficial aspect of the cooperative education program was the actual work experience gained.

Mr. Porter went on to speak about the promise and potential of cooperative education. He projected a rapid expansion of cooperative education services, to 1,500 institutions servicing 500,000 cooperative education students, by 1980. Urging that cooperative education collaborate fully with career education, he emphasized his deep concern that linkages between academia and the world of work be fashioned in a most sensitive manner.

Mr. Porter concluded by saying, "If free enterprise is to survive, cooperative education and career education offer hope to mitigate a fatal compartmentalization."

Dr. Dow, the last panelist, began his remarks by urging that the American population be educated to enjoy its jobs.

"I speak about career education for my constituency, from my point of view, and also I must speak for the absent minorities," he said.

Addressing post-secondary education's objective (to enrich people's lives), Dr. Dow emphasized education's need to meet the total needs of society.

"Education must know how and why to fashion the curricula to meet the needs of deprived minorities. In education we must deal honestly, with ourselves and our institutions. . . .We need supporters of a humanistic society to provide meaningful education to minority audiences. . . .We must be aware of the needs and lifestyles of minorities. . . .(Current) learning sources are too constricted and narrow to be relevant to minority peoples," he said.

Calling minorities nonparticipants in the mainstream

of career education, he stated that career education is not concerned with minorities' participatory needs.

"The results are plain. Minorities become blue collar workers, or are unemployed," he said.

Dr. Dow stated forcefully that post-secondary education must promote equality and that, to do this, it must become more flexible and must be restructured.

Commenting that education must permeate every facet of lifelong learning, and that we must change our attitudes about jobs and leisure, Dr. Dow mentioned that post-secondary education relates to traditional roles. He recommended a shift in emphasis to an umbrella concept, to a career education concept.

"Career education. . .must be fashioned by a heterogeneous society. Otherwise, the effort is abortive and undermines our society," he said.

After reminding the audience that post-secondary education is found in industry and in the laboratory as well as in the classroom, Dr. Dow urged participants to strive for more ethnic relevance in career education.

Session 502
Promise and Potential for Career Education in Post-Secondary Education

Panelists Discuss Federal Interagency Efforts in Career Education

Mr. Dick Devlin, Director, Education and Work Project Staff, U.S. Department of Labor, Washington, D.C., opened a session on Federal Interagency Efforts in Career Education by remarking that career education is a facet of the transition from school to work and the problems associated with that transition. He noted that the panelists were "committed to interdepartmental cooperation but also need the full support of unions, educators, businesses, etc."

"The recent history of the Department of Labor has been on the side of vocationalism focusing on the internal measurement of performance and on youth-remedialism," he said. "We have sought to work with educators, especially those connected with career choice because of transition problems. We see this need because of the problems of youth unemployment, the crime rate, and increased numbers of dropouts. Although the youth group has been studied and programs have been initiated, the underlying problems have not been solved. We need to focus in on skills, new technological development, and exposure of youth to occupational and labor market information."

The conclusion reached by Mr. Devlin is that society's institutions have been inefficient in preparing youth for the future.

He noted that today it is evident that we are in a "crisis situation" with high youth unemployment, especially among blacks.

Mr. Devlin stated that in the past, Congress has responded to this problem with the enactment of legislation such as the President's Advisory Council on Youth, the Job Corps, and minimum wage laws.

"Under the Ford administration, there was concern with local institutions and their isolation from each other and with task force reports on these problems. Because of the change in top leadership and bad economic times, interdepartmental efforts have been hampered," he said.

He commented that now there is an Interagency Steering Committee, chaired by Dr. Ben Burdetsky, to give direction to the overall projects. This committee stresses local involvement of students, counselors, educators, the community, schools, government, and labor for long-term benefits.

"It is an effort to bring local, State, and national (both governmental and nongovernmental) efforts for education more closely together," he said. "As an illustration, the National Manpower Institute has done some recent work advocating community involvement through establishing councils with representatives from all sectors. The councils have concentrated on curriculum change, occupational projects, work experience opportunities, and cooperative work programs. They have been able to establish an active information exchange by drawing from community education, publications, libraries, and training and technical assistance efforts. Some other local collaborative efforts include efforts of the National Alliance of Businessmen, community colleges, and labor union leadership."

Mr. Devlin remarked that there definitely has been a trend toward more private sector involvement as evidenced by the American Association of Colleges and Junior Colleges and the Human Resource Development Institute of the AFL-CIO, whose thrust has been a labor center with apprenticeship and journeyman training along with the development of a labor education curriculum.

He noted that the focus has definitely been on local involvement and cited CETA youth programs and explorer programs as other examples.

He also said that State manpower has become more involved and there has been a more effective linkage between career education and vocational education in occupational projects.

Mr. Devlin advocated review of Federal law, especially the child labor laws, but said he had no definitive answer as to whether these should be changed. He stated that these laws do protect youth from exploitation, but said there is some question as to whether they are barriers to youth programs.

He told participants that one of the chief roles in the Labor Department's efforts has been the improved dissemination and utilization of occupational career guidance information. This is accomplished through the National Occupational Information Service and the Bureau of Labor Statistics.

In conclusion, Mr. Devlin remarked that the Department of Labor's interest must survive beyond the cur-

rent unemployment situation. He did not promise additional Federally-funded programs, but did say that the gap can be bridged through local involvement.

Dr. George Pratt, Special Assistant for Education, Office of the Secretary, U.S. Department of Commerce, Washington, D.C., was the next speaker.

Dr. Pratt said that the Department of Commerce's involvement in working with the relationship between the institution of education and the world of work has been in information gathering and dissemination to communities as well as that done by the National Bureau of Standards and the Census Bureau.

Dr. Pratt noted that career development and education is a significant concern in light of the fact that the majority of the people working are employees in the private sector, and in view of the amount of money spent annually on education.

"Education has a $125 billion operating budget and the money allocated to training in business and industry is equal to that amount. There are 50 agencies that deal with education and 350 programs for post-secondary education alone," he said.

He continued, "Management effectiveness has been gained through interdepartmental coordination and cooperation especially with the Department of Defense, the Department of Agriculture, the Veterans Administration, the National Science Foundation, and the Environmental Protection Agency. For example, there are many educational and training considerations thought through in EPA grants to State and local governments."

Dr. Pratt stated that the Department of Commerce's concerns with production, growth in GNP, and the quality of life have a lot to do with education and training.

At the local level, he said that business and industry have become good corporate citizens by becoming greatly involved with career education in particular and education in general, because "it's good business in their own enlightened self-interest."

According to Dr. Pratt, the way to bring the educational institution and the world of work together is to collaborate at the local level. He said that the career education model is the most frequently discussed example of collaborative effort, but cautioned that there are seven principles which must be followed.

1. A great amount of goodwill is needed to establish a collaborative effort.
2. An entrepreneurial-marketing approach is necessary.
3. The requirements of the management process must be clearly defined—e.g., objectives, funding, evaluation, and staffing.
4. The gap can be bridged through cooperative education with volunteers.
5. The importance of the role of parents must not be overlooked.
6. Labor market projections must be made.
7. The role of humanities and the arts in the world of work must not be forgotten.

"The best advice I can give is to know and understand the name of the game," he said.

Dr. Pratt stated that the Department of Commerce, with the Advisory Council, has developed an economic primer entitled *The American Economic System and Your Part in It.* (Single copies are available free of charge from the Federal Information Center, Boulder, Colorado. Multiple copies are available for printing costs from the Advisory Council in New York City.)

In response to the question of how to focus private sector resources on youth development, Dr. Pratt said this can be done only with the cooperation of business, industry, government, labor, and youth through:

1. Developing a high professional advocacy for youth development
2. Taking the initiative in policy questions in school
3. Committing resources (both time and money)
4. Getting involved and collaborating in efforts between the world of work and education
5. Expanding career opportunities and eliminating artificial barriers and stereotypes
6. Investing in the future and sharing job market data, projections, etc.

Next, Dr. Justine Rodriguez, Special Assistant for Interagency Affairs, U.S. Department of Health, Education, and Welfare, Washington, D.C., spoke of the interdepartmental effort for career education as a political and long-term effort.

Noting that in many respects the Federal government is looking for local efforts to assist other local efforts, she said that the main thrust has been to collaborate with interested agencies.

"In the beginning, the task force meetings were frustrating because concerns needed to be sorted out and looked at in terms of potential pitfalls," she said. "The leadership involved changing other people's perceptions of their own self-interests. Because of this, we are better prepared and equipped with materials to see the system maintained. This is absolutely essential for the process of career development, not only for youth, but for everyone from child to adult. It is indeed difficult for young people today to understand what careers are all about especially in light of the changing environment."

Dr. Rodriguez said she sees the goals of these efforts to be: (1) expanding the use of the whole community as a resource, (2) broadening the options and increasing the opportunities for youth, and (3) providing information, guidance, and placement services.

Dr. Rodriguez noted that the strategy of technical assistance has been concentrated on demonstration programs. She stated that State and local coalitions and the creation of self-help networks among them can't be stressed enough.

In conclusion, Dr. Rodriguez said she would like to hear from State and local programs in terms of barriers to their efforts, e.g., laws and regulations.

Session 503
Federal Interagency Efforts in Career Education

Career Education and Basic Education Seen as Different But Compatible

"Career education and basic education have different but compatible goals," said Mr. Charles Heatherly, Education Director, the National Federation of Independent Business, San Mateo, California.

"Career education needs to be based on the three 'R's'—reading, 'riting, and 'rithmetic. Career education contributes to basic education and is enhanced by it," Mr. Heatherly added in a panel discussion on Career Education and Basic Education: Allies Not Enemies.

"Career education and basic education are not enemies because basic education is a basic part of career education," said Dr. Rita Bryant, Associate Professor of Education, Texas Eastern University, Tyler, Texas. "There is nothing more salable than reading, writing, and math, which form the basis for both."

When parents were asked what math goals they wanted for their children, the ability to relate math to real life problems was a common answer, according to Dr. James Gates, Executive Director, National Council of Teachers of Mathematics, Reston, Virginia. People want to see more relevance in the math curriculum, Dr. Gates said.

"Career education should be part of the curriculum. It does not minimize math," Dr. Gates emphasized. "Teachers do not need extra time to teach career education because it can substitute for motivation," he added.

"I oppose any movement which would make math part of a vocational curriculum. But math has to be taught bringing in the real world," Dr. Gates said.

Basic education is not only basic skills; it is a philosophy of education which says that all students, except the retarded, should have instruction in all basic skills, including math, reading, science, and history, said Dr. George Weber, Associate Director, Council for Basic Education, Washington, D.C.

"If career education means training for work, then this is an anti-intellectual, narrow approach and would certainly conflict with basic education. If it means a study of work, then this is antagonistic to basic education. And if it means ridding school of everything that is nonutilitarian, like French or history, then this is also anti-basic education," Dr. Weber said.

"However, making applications of something taught as a subject—e.g., showing that adding up figures in a grocery store is math—is okay," he stated. "In this case career education is not an enemy of basic education."

Mr. Heatherly rejoined, "I feel that perhaps I should clarify some of Dr. Weber's remarks. I believe that career education merely makes the students aware earlier of the wide variety of jobs available, and lets them know the skills they will need. It would be wrong to purge the curriculum of nonutilitarian matter and I hope career education is not on record as saying this," he added.

Dr. Bryant added that she is an advocate of an infused approach to career education.

"If it fits, put it in there. Only a well articulated scope and sequence of career education should be used," she said.

"One example of a career education skill can be pumping gas," said Dr. Weber. "This is a nongenerative, dead-end skill. In instances like this, career education is teaching people a low-level job with no progressive movement," he contended.

Mr. Heatherly pointed out that career education teaches planning and decision-making skills, not occupational skills.

"The point is not to make a career out of pumping gas, but to handle that job well. To be responsible in that job is what is important," he said.

The unemployment rate is highest among the youth, said Dr. Wayne Teague, State Superintendent of Education, Alabama State Department of Education, Montgomery, Alabama.

"Better and more realistic vocational counseling and placement are needed in schools," he concluded.

Session 504
Career Education and Basic Education: Allies Not Enemies

Koontz Calls for Halt in Sex Stereotyping

"Occupational sex stereotyping has changed little over the past 20 years," said Dr. Elizabeth D. Koontz, Assistant State Superintendent for Teacher Education, North Carolina Department of Public Instruction.

Following introductory remarks by Ms. JoAnne Calderone, National Institute of Education, Dr. Koontz told participants in a session on occupational sex stereotyping that when a man and woman are considered for a professional position, the man is still usually hired instead of the woman even though she may be more qualified for the position.

"In the back of our minds we feel that a man has a family," said Dr. Koontz. "Actually society rewards its members because of their sex and not for their competence. For example, we urge women into teaching and into education, but it takes a woman three times longer to make full professor than it does a man, despite the degree, the publications, and the experience or performance."

Dr. Koontz raised several questions pertinent to this subject: for example, why does this discrimination exist and what can educators do about sex stereotyping to refrain from making the same mistakes over and over again?

"We have been culturally conditioned into sex roles," Dr. Koontz said. "Three-year-old boys are told when their fathers go on trips to 'look after your mother and the girls'. Boys are told 'you are the man in the family', and they get the

idea quickly. These boys go to school and tell the girls that girls are supposed to be nurses, not doctors. If you watch children play you'll see examples of this."

According to Dr. Koontz, sex stereotyping has also been caused by translating the Bible literally.

"We hold onto the sections of the Bible that suit us and not others," she said.

Dr. Koontz added that part of the conditioning in our society has been that our culture assigns what we call the "heavier" work to men because of their "brute strength."

"Society has said that men should do one kind of work and that women should do another. We said it by law. We said that a woman could not be employed in any kind of job where she was required to lift more than 11, 14, or 25 pounds, depending upon the State in which she lived," Dr. Koontz said. "This was the means by which many women were socialized into thinking that certain kinds of jobs were off limits, therefore they need not aspire. Women pick up 40-pound babies all day long and carry their babies while doing housework and marketing, yet women are eliminated from jobs because job specifications require brawn," she added.

According to Dr. Koontz, if changes are going to take place, society must become more aware of sex stereotyping.

"Change is uncomfortable, but if career education is to be what we have said that it will be, then we will have to take another look at what you and I, as dedicated career educators, have still not been willing to recognize," she said. "We must examine ourselves and realize that we have been sex stereotyping for so long that we aren't even aware of it."

Dr. Koontz advised participants to make sure that their State textbook committee studies sex stereotyping and that when sexism is noticed, it is called to people's attention.

Recommending that action be taken in positive ways, she urged, "Don't buy products that use sex stereotyping in their advertising. Hit the people that count."

Dr. Koontz noted that there is a growing conviction that the women's movement will not go away.

"Because the movement is freeing people, there is no controlling it," she said.

"Some people feel that they have the right to determine the limits of other people's lives; however, this nation cannot afford to discriminate because of religion, race, or sex," she added.

In conclusion, Dr. Koontz called for educators to take the lead in eliminating bias and discriminating against women.

Session 505
Occupational Sex Stereotyping: Past, Present, and Future

Herr Advocates Varied Approaches to Career Education

In a session entitled Career Education: A Perceptive Perspective, Dr. Edwin L. Herr, Professor and Head of Department of Counseling and Educational Psychology, Pennsylvania State University, University Park, Pennsylvania, emphasized that work preparation involves more than training and retraining and that it extends to all youth and all adults.

"The achievement of goals depends on how the job is done plus the psychological attitude of the individual performing the job," he said.

According to Dr. Herr, this psychological attitude must be molded to equip an individual with (1) a knowledge of his/her strengths and weaknesses, (2) a knowledge of preferences and values and the skill to relate them to work, (3) the ability to explore, (4) the ability to make decisions rationally, (5) the skill to handle interpersonal relationships and to adapt, (6) effective means to organize time, (7) the ability to see oneself as someone, (8) an understanding of the personal role as employee, and (9) marketable skills.

Dr. Herr said that career education is unique because a network of problems, rather than isolated issues, stimulate career education movements. Therefore, he concluded that career education cannot be achieved by one set of specialists, but must be planned and can be done in many ways.

"Above all, career education is neither an interchangeable term for vocational education nor is it curriculum competing with other curricula. Rather, it is a set of ideas that can be integrated with other curricula to enhance them," he said.

Dr. Herr stated that career education has often been challenged as a conspiracy to limit the mobility of minorities but that actually it seeks to open opportunity by helping individuals to establish goals and then define their destiny.

He added that career education is not "anti" higher education and does not devalue it.

Session 506
Career Education: A Perceptive Perspective

Floridians Describe Career Education Consortium Activities

A program presenting an overview of the Career Education Consortium activities at the secondary level in the counties of Manatee and Sarasota, Florida, was presented by Mr. Walter Bucklin, Director of Career Education, Manatee County Schools; Dr. Mary Green, Guidance Specialist, Career Education Consortium, Manatee Junior College; and Dr. John Pelletti, Director of Career Education, Sarasota County Schools, Bradenton, Florida.

In the introductory address, Mr. Bucklin told participants that in 1967, Manatee County received legislative funding for career education, on the basis of school popula-

tion. A career development program was designed in 1973 and implemented in the area for a 3-year period by the Advisory School Board of Manatee.

Mr. Bucklin stated that a structural orientation program was begun at the elementary school level, with much emphasis on the role of primary schools in career development. He noted that within two years, 500 teachers at the elementary school level were participating in a paid training workshop and said that the same plan was implemented at the middle school level.

"Orientation to the department chairperson and then to the entire faculty was the method utilized at the high school level," he said. "In addition, piloting of some specific strategies has resulted in adoption of programs by all four high schools in the county."

One such program is a 3-week mini-course for incoming ninth graders. According to Mr. Bucklin, the activities in self-awareness, career options, using community resources, and high school program planning have been accepted by both students and faculty.

"The success of the experimental program has resulted in the establishment of a 9-week mini-course for all ninth graders," he said.

Another program, aimed at increasing student awareness of career opportunity, is an accredited course using the Life Career Development System. This system is divided into nine modules entitled exploring self, determining values, setting goals, expanding opinions, overcoming barriers, using information, working effectively, enhancing relationships, and creating futures.

Next, Dr. Pellettl spoke of several career education programs offered in Sarasota County.

"Working with the idea that students had a bad impression of the business world, the Sarasota Chamber of Commerce initiated a program known as Expo '76," he said. "This was a business fair in which 80 businesses and industries were represented. High school seniors were driven to local areas to see exhibits and talk with employees of the various companies."

He also noted that a structural program in career guidance development entitled Getting Ready For Your Future, previously offered only in high school for the gifted, had been modified for use in all high schools. According to Dr. Pelletti, this 1-hour credit course is an independent study experience. Now in its pilot stage, the program is geared for honor students. The student spends six sessions with a guidance counselor and is provided with information about opportunities for career planning.

In conclusion, Dr. Pelletti mentioned two other programs, now in the developmental stages. These include a comprehensive, 7-12 career guidance program for the district and a new community-based program for career exploration, he said.

The final speaker, Dr. Mary Green, a member of the Florida Career Education Consortium, spoke about the functions of the organization. She related that the consortium members include the counties of Manatee and Sarasota, Manatee Junior College, and the University of South Florida.

"One of the primary concerns of the consortium is the improvement of career education activities in the region it serves. Special emphasis is placed directly upon secondary and post-secondary institutions," she said.

Another goal of the organization is the development of a comprehensive vocational model to articulate career training from the kindergarten to the university levels.

According to Dr. Green, career education for parents is also very important, as they are the main "opinion molders" of students.

Session 511
Career Education Practices: High School

Boston University Offers Course Study in Career Education

Boston University, Boston, Massachusetts, offers course study in career education in its Department of Business and Career Education, according to Dr. Harold S. Resnick, Associate Professor in that department.

He noted that the university offers undergraduate and graduate programs in the department. Some of the courses he listed include school-business-community cooperation, media in career education, career education for special needs students, and technology for children: career awareness. The two courses introducing graduate study are Career Education: Implementation and Practices, and Career Education in College and School Curriculum.

The master's program requires 36 credit hours of study. Each course is a 4-credit-hour course, Dr. Resnick said.

A sample degree plan in the program would include core courses such as a seminar in business and career education, evaluation in business and career education, and school-business-community cooperation.

To achieve a Ph.D., enough additional graduate level hours over the master's work to total 60 hours is required. At this time the university has graduated two students with Ph.D.'s. There are about 10 students in the doctoral program now.

Session 516
Career Education Practices: Teacher Education Institutions

Self-Esteem Seen as Vital to Child's Ability to Learn

Self-esteem may be a vital component of a child's ability to learn, according to Mr. Greg Kania, a Consultant Trainer for the Region IV Education Service Center from Houston, Texas.

In a seminar on The Elementary Counselor and Career Education, Mr. Kania emphasized the importance of effective education for students and teachers by citing recent studies on elementary school children.

One study shows that, for kindergarten children, the level of self-esteem is a better predictor than IQ of reading ability.

Mr. Kania related, "In another study, researchers took all children in a school from kindergarten through twelfth grades and measured their self-esteem levels. The lowest 15 percent did only three-quarters of the work of a school year each year. The teachers were then taught to raise the kids' self-esteem levels. After one year, the 15 percent who were previously lowest in self-esteem were now in the fortieth percentile on self-esteem. They now learned one-and-one-half years' learning in one year. They weren't the dumb dodoes everyone thought they were."

Ms. Lila Macaluso, another Consultant Trainer for the Region IV Education Service Center, Houston, added, "A national study found that children lose self-esteem between grades three and six. Why? It can't all be the home environment. I want to do something about it."

Mr. Kania and Ms. Macaluso taught games in values clarification to the seminar participants to emphasize individuality. They then organized the participants into groups to discuss ways in which teachers contribute to lowering students' self-esteem.

Participants decided that some of the most common practices of teachers contributing to lower self-esteem of students include singling out children for privileges or punishment, imposing adult values and talking down to children, not allowing enough freedom of expression, taking out frustrations on their charges, and restricting students by grouping them according to intelligence.

Session 517
The Elementary School Counselor in Career Education

State Education Agencies Play Critical Role in Career Education Infusion

The role that State Education Agency personnel play in the infusion of career education into the educational system is a critical one. The more people that are involved in the process, the better the chances of its success, according to Dr. Gene Bottoms, Director, Division of Program and Staff Development, State Department of Education, Atlanta, Georgia.

Dr. Bottoms advocated total agency involvement in all phases of planning, coordination, and implementation as the key to establishing career education as an integral part of the total curriculum. Every department in the education agency must take part in promoting the concept of career education, he said.

According to Dr. Bottoms, policy development is the first step that should be taken to establish the education agency's commitment to career education. The policy should include expectations for State staff and local school districts, a definition of the concept, assignment of responsibility, and procedures for implementation.

He commented that a clear understanding of the direction of the education agency is essential if department personnel are to carry out their roles in the infusion process. To infuse career education into all phases of the educational system, each discipline must have its own strategy for implementation, he stated.

In the Georgia Department of Education, each curriculum unit is developing its own mini-plan along with a resource guide for local educators. Each unit operates with the assistance of an advisory council.

Dr. Bottoms said he felt that taking the concept of career education to the local level is the responsibility of curriculum unit coordinators who work with people in the schools and can personally convey the commitment of the State education agency.

Dr. Bottoms suggested that needs assessments be conducted to provide evidence of the need for career education. These can be done on a local level to demonstrate to district superintendents and teachers the needs in their own communities. He pointed out that follow-up studies on high school graduates may provide the information to convince local educators of the need for career education.

"An influential local superintendent, one who commits himself to the career education concept, can be the most effective change agent," he said.

Dr. Bottoms recommended the involvement of business, industry, and the community to help bring about the infusion of career education. He also advised that legislative endorsement be sought to support the efforts of the State education agency.

Session 521
State Education Agency Personnel in Career Education

Nebraska Career Education Coordinator Says Coordinating Can't Be Done Alone

Ms. Bonnie K. Bothe, who began as a music teacher and is now in her second year as Career Education Coordinator at East High School in Lincoln, Nebraska, presented some of her ideas on the role of the career education coordinator.

"First, no educator should be so foolish as to take all career advising into his/her own hands," said Ms. Bothe.

At East High, each teacher serves as a career advisor for 24 students. A student has one advisor in seventh grade, a second for eighth and ninth grades, and a third for the last three years, so that the advisors can learn with their students in the new program.

Ms. Bothe noted that the support of department chairmen is particularly important, for without them, a career education coordinator can find himself or herself shunted aside.

She mentioned that at East High the program is infused into the entire system, and said this is far more successful than trying to teach career education as a block.

In addition to the coordinated guidance program, Ms. Bothe has designed many programs in use elsewhere to fit the needs of her school and her place in East High's Media Center. She uses the Occupational Viewdeck and Career Information System of Iowa (CISI) in conjunction with a Vocational Exploration Group (VEG) to help her students think about career choices. CISI relates a student's temperament to what succeeds in the world of work, while the VEG group process aims at helping students eventually learn a process for making career decisions and identify the necessary qualifications for getting a job.

"The Media Center also has a huge display of our available material on careers on a window near the cafeteria so that students can become acquainted with them at their leisure, know when special events are coming, and learn about the awards other students have received in career-oriented fields," she related.

One of those special events in Spotlight on Careers is a speakers' program, coordinated by department chairmen who select members of the community to discuss their careers, as well as career requirements and qualifications.

"The speakers also spotlight the futures of their positions. You can't tell everyone they can be a teacher, as we've done in the past, and then 10 or 15 years later, have a lack of openings that the next generation won't be able to fill. You've got to be honest," Ms. Bothe said.

A student's direct contact with career education at East High does not end with speakers and testing, however. The self-assessment center, as Ms. Bothe called her media program, offers a variety of Cooperatively Planned Units (CPUs), which she described as "an independent study contract with objectives and requirements done by the student for credit, which includes specifications for grading."

Ms. Bothe noted that CPUs have two levels. For the younger students, the CPU deals with attendance, attitude, experience, and aptitude in a general manner.

"All of this is put into a package format," she emphasized, "so that the student can't claim later to have been lost."

The second level of CPU explores and expands the students' knowledge of careers open to them, using the HEW career clusters and subject clusters.

"If a student is good in math, we have all the math-oriented careers and their direct relationships to the study of math outlined for the individual to investigate," she remarked.

Counselors work on level one CPUs, while Ms. Bothe retains a direct relationship with the students in level two CPUs. One thing which separates the CPU contract from a regular course is that the student has the option of stopping at any time if he/she finds the career being explored isn't what she/he was looking for.

Ms. Bothe concluded her talk about East High with the assessment that "this has really been an effective program for *all* types of students, the gifted as well as the non-gifted. What we're trying to do is to open up the options available to them, not narrow them down."

Session 523
The Career Education Coordinator

Shirley Outlines Steps for Systematic Management of Career Education Programs

"The Region X Education Service Center (ESC) in Richardson, Texas is one of 20 regional institutions in Texas designed to assist school districts through cooperative efforts ranging from long-range planning to short-term problem solving," according to the center's fact sheet.

The fact sheet was distributed to participants in a session on Systematic Management of Career Education Programs by Mr. John Shirley, Coordinator of the Career Education Project for the Instructional Services Department of the Region X ESC.

Mr. Shirley explained that today Region X serves seven school districts. His career education project has developed a sequential career education program including all grades.

Mr. Shirley said that the program involves 10 steps:

1. Obtain top-level commitment.
2. Develop a management plan.
3. Determine student and institutional needs.
4. Identify in sequence the career education learner outcomes. (There are 127 outcomes upon which the curriculum of public education in Texas is

based.)

5. Identify and catalogue community resources.
6. Implement a planned staff development program.
7. Develop curriculum around the sequenced career education learner outcomes.
8. Implement curriculum.
9. Evaluate.
10. Repeat.

Emphasizing that all of these steps are necessary, Mr. Shirley related, "We used to start off in our career education program with level six. However, we felt that this was a mistake. We feel a good foundation must be built by following all the steps of the program."

To implement career education in the local school district, Mr. Shirley prescribed the schematic PICES (Phasing In Career Education Systematically) project design or flow chart.

The flow chart depicts about 41 steps including board of education approval, the orientation of the administrative staff, needs assessment for all levels, testing, the use of computers, evaluation, etc.

The flow chart can be used by the career education management team to keep the district on a steady course of implementing career education, Mr. Shirley said.

He explained that the management team for his project consists of a district coordinator and a campus coordinator. The district coordinator should be someone with a flexible schedule, i.e., a counselor or an assistant principal, Mr. Shirley asserted, while the campus coordinator might be an interested teacher.

Mr. Shirley emphasized that these coordinators must be volunteers, and commented that, "The quickest way to kill career education is to require it."

Session 524
Systematic Management of Career Education Programs

Participants Discuss Problem of Scope and Sequence in Career Education

In solving the scope and sequence problem in career education, presenters noted that definitions are necessary to understanding. Scope involves identifying what will be taught and sequence involves the appropriate placement of students on the career path, according to Dr. Elvis Arterbury, Project Director, Partners in Career Education, Arlington, Texas, and Dr. Bill Smith, an evaluator from the Region X Educational Service Center, Richardson, Texas. They defined career education as "the totality of experience through which one learns about and prepares to engage in work as part of his or her way of living," and addressed three levels of learner outcomes or phases of instruction.

Dr. Arterbury began by stating that a learner outcome includes the ability to define the term "goal," the ability to apply decision-making steps to solving personal problems and career choice, the ability to understand the necessity for having a satisfying job when setting career goals, the ability to understand that people work better when they accurately match their personal goals with their career choice, and the ability to use resourcefulness to solve personal problems related to their career choice.

Dr. Smith explained that there are also three levels of learner outcome—introducing students to a learner outcome or portion thereof, developing a learner outcome, and emphasizing or intensifying the focus of a learner outcome or its parts to produce in-depth understanding by a student.

The main question addressed by both Dr. Arterbury and Dr. Smith was, "What attitudes, skills, behaviors, and career courses does a 17-year-old need to be successful in today's society?"

To answer this question, 6,000 Texas citizens including parents, educators, business, industry, and State officials helped establish 177 learner outcomes for career education that a 17-year-old needs to achieve before leaving high school.

Which teacher should teach what subject is also a regular part of the research. Presenters noted that the composite data helped to develop a common-sense program for the implementation of career education in public schools.

"The challenge is to design a program with sufficient flexibility to meet the needs of any school district that is affordable to all districts," Dr. Arterbury said.

Session 527
The Problem of Scope and Sequence in Career Education

From left, Dr. Vivienne Anderson, Assistant Commissioner for General Education and Curricular Services, New York State Education Department, Albany, N.Y.; Mr. Sam Corsi, Coordinator, Career Education Dissemination Project, Albany, N.Y.; Dr. Stephen Aiello, Commissioner, New York City Board of Education, Brooklyn, N.Y.; and Mr. Lewis G. Harriman, Jr., Vice President, Manufacturers and Traders Trust Company, Buffalo, N.Y., at the New York State caucus.

Chamber of Commerce Combines Business and Career Education

The Chamber of Commerce is an important factor for the success of career education, according to Mr. C. Frohman Johnson, Manager of Economic Affairs for the Michigan State Chamber of Commerce.

He told participants that a model program attempting to combine business and career education has been designed in Michigan. Entitled Career Education: A Prospectus for Business and the Community, this program concentrates on helping students in a career choice, he said.

The program includes a Youth-Business Dialogue (YBD) component, focusing on business economics, in which business people spend a full day with students out of school talking about the business system in a common language. Mr. Johnson said that four topics are covered: profits, government relations, community participation, and career choice.

He noted that a total of 125 YBD programs have been developed and added that they won the 1974 American Freedoms Foundation Award.

Mr. Izzy DiMaggio, Director of Career Education for the Twin Cities Area Chamber of Commerce, next described the program for career education in the Minneapolis-St. Paul area.

"This program, funded by the Comprehensive Employment Training Act (CETA), sets standards to familiarize the student with available career opportunities," he said.

The program consists of a series of films, a career development day "rap session" with business professionals, an on-site career experience where students visit industries, and an opportunity for students to hear a personnel manager talk on interviewing techniques.

The program also includes a 10-week economic education workshop which allows teachers to learn about the economic system.

Both Mr. Johnson and Mr. DiMaggio emphasized that business and education, united, can improve students' career success.

Session 529
The Chamber of Commerce in Career Education

IPAR Attempts to Make the Community a Classroom

The need for community resources to bring realism to career education has led to an active partnership between the Institute for Public Affairs Research, Inc. (IPAR) and the schools in the metropolitan Portland, Oregon area.

Mr. William Moshofsky, Vice President for Governmental Affairs, Transportation, and Environment, Georgia-Pacific Corporation, Portland, Oregon, described IPAR as a central scheduling center through which teachers can request resources in a continuing system.

The IPAR program is community-funded by 200 organizations in the metropolitan Portland area. Mr. Andrew Jacobs, Executive Director of IPAR, related that the program has a staff of six people and serves approximately 10,000 teachers in 57 school districts in the Portland area.

Noting that he sees the program as a link between the schools and business, Mr. Moshofsky said that the board of directors for IPAR consists of people from organized labor, business and industry, government, professions, and education.

Ms. Cathy Williams, Career Education Coordinator at Madison High School, Portland, Oregon, said she believes the greatest disadvantage of any career education program is teacher apathy.

"Extensive teacher training is provided through in-service classes, and IPAR plays a big role in this teacher training program. The teachers are encouraged to go out and see what the students are doing by taking an active part in on-the-job visitations and plant tours," she said.

According to Mr. Jacobs, a strong feature of the IPAR program is its broad-based support from the community.

"A successful program must have plenty of resource people to eliminate repetition," he said.

Mr. Moshofsky concluded the session by stressing the importance of getting chief executives involved in order to obtain the money and cooperation needed from the resource people.

Session 531
Career Education and the IPAR Program

New York Students Learn by Doing as Business and Education Cooperate

Creative cooperation between the educational community and members of the private sector has yielded a unique program designed to improve students' reading and writing skills and broaden students' career awareness.

Called the Publishing Activity Center (PAC), the program incorporates the needs and services of over 190 New York City schools with the needs and services of two members of the private sector: The Gestetner Corporation and the *New York Times*.

"Because results of standardized tests and evaluative analyses revealed a rapid decline in reading skills at all levels of education, the need was seen for a program which would motivate pupil learning in the academic disciplines, especially in the language arts (reading, writing, and comprehension)," Mr. Herbert Siegel, Director of Industrial Arts, New York City Board of Education, explained.

State and Federal educational agencies reported a need for more vocational training and career education; thus, the idea of combining the language arts and industrial arts was born.

Mr. Harry Krane, Supervisor of Industrial Arts, Center for Career and Occupational Education, New York City, noted that a student's overall academic achievement is directly related to his reading skills.

Ms. Marjorie Longley, Assistant to the Director of Consumer Marketing for the *New York Times*, called the involvement of the newspaper "pragmatic, since readership is crucial to the life of a newspaper."

Mr. Joseph Schachner, Director of Educational Activities for the Gestetner Corporation, Yonkers, N.Y., spoke of the role of his company as "a bridge between the Board of Education of the City of New York and the *New York Times*." (The Gestetner Corporation supplies all necessary equipment to the PAC.)

Mr. Siegel related that in the PAC model, elementary age children perform all activities involved in preparing a published product. This includes preparing copy, editing, proofreading, layout, typesetting, printing, binding, and distribution. Thus, the children learn language skills and skills needed to use special tools, materials, and equipment relative to the graphic arts area.

Ms. Longley added that not only does the program provide "learning by doing," it also involves everyone —including the children themselves, the teachers, the school administration, parents, community, and school boards.

Although the standardized scores did improve, Ms. Longley said, "What's more important is that the attitude of the students changed. Suddenly they have some kind of fruition."

To encourage further quality in the program, she noted that the *New York Times* had established an award program, based on professional standards of good writing, good presentation, attractive layout, and accurate reflection of the school and the community. The award is given on different academic levels and is judged by top executives of the *Times*. The benefit of the award is, as Ms. Longley stated, that "it gives us an opportunity to recognize the excellence of the kids and the teachers."

Session 532
Involving the Business Community in Career Education

Washington Career Education Program Provides Options for Migrants

Mr. James W. Crook, a certified counselor, is the Director of the Yakima Migrant Career Education Program for Washington State. The program was created to fill a specific need in the Yakima School District: the need for secondary migrant students (aged 14-21) to be enrolled in an educational system which meets their unique requirements as migrant students.

According to Mr. Crook, in order to qualify as a migrant, a student must have moved from one school district to another in order to seek agricultural types of employment.

"In that particular instance, he/she is a true migrant for a period of one year," explained Mr. Crook. "In order to be classified a 'settled-in' migrant, he/she must stay within the boundaries of our school district for an additional three years, so we are talking about the possibility of a student staying for four years in the Yakima School District as an identified migrant student."

Mr. Crook added that the student must not only be identified as a migrant, but also must have either dropped out of school or be known as a potential dropout, and need a flexible program in order to continue formal education. For referral sources, the program has four social workers within the school district who work in the orchards, community centers, and other public places.

As Mr. Crook expressed it, "Our goal for them is not to complete high school or get a GED. I think the underlying philosophy of the entire program is for them to take a look at some career options differing from what they are doing now."

Mr. Crook stressed that the program is not an alternative high school program for dropouts nor is it an alternative junior high school program. He noted that the Yakima School District operates those kinds of programs for different kinds of populations.

Stating that the program does not have goals set up for the students, he commented, "We start with asking them about their educational goals. Some talk about a goal that would include a high school education. Many think they need a diploma in order to get a better job. So we are talking about expanding their concept of what an educational program is."

Mr. Crook told participants that often people enter the program with a feeling of desperation.

"They feel this is their last chance to get an education. When young people 18-20 years old come to you with these thoughts, it makes you realize the situation they are in is critical," he said.

As soon as a student enters the program, he/she is registered as an A.C. Davis High School student. The students take their classes in a portable building separate from the high school where the career education program is based.

"Yakima School District's immediate need is a program for dropouts," explained Mr. Crook. "At the second grade level, between the settled-in and the true migrants, we have approximately 110 identified potential dropouts within the district. This works through the grades until we know that there are roughly 360 to 375 students who leave the educational program in our district simply because the district and program that it has is not meeting their particular needs."

Mr. Crook said he believes that emphasis should be

placed on preventive measures at the primary level.

Quoting from an informal survey of migrant students, Mr. Crook listed a few reasons most students gave for dropping out of school.

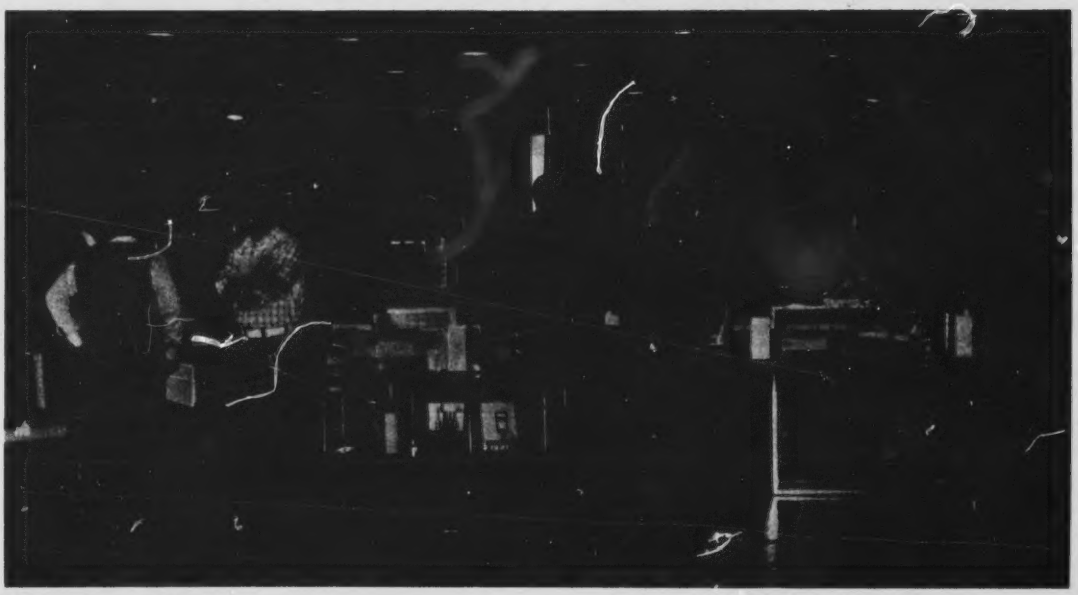
1. The rigid class schedule enforced in the school district does not allow for the kind of flexibility needed for student migrant workers.
2. The tri-semester system makes it difficult for migrant students to register.
3. If a student has to move mid-semester or is unable to finish the course, partial credit is not available.

"We feel that we are in a position to offer migrant students some alternatives and some choices. If they choose to be migrant laborers, that's okay, too. There are a number of options that can be open to them," he concluded.

Session 535
Career Education for Migrant Workers

Mrs. Emiko I. Kudo, Assistant Superintendent, Office of Information Services, Department of Education, Honolulu, Hawaii, at the Hawaii State caucus.

Mr. Paul Peters, Chairman of the State Task Force on Career Education, addresses the California State caucus.



The Science Research Associates, Inc. exhibit attracts many participants.

Frederick School Carries Out Multi-Stage Career Education Program

"When my kids came and asked me 'Why do we have to learn this?', my standard answer was 'Because you will need it in the eighth grade'," said Ms. Jeanette Vyduna, a seventh grade teacher at Frederick Junior High School. "This was a cop-out. Then I began looking into career education. Now when they ask me, I say 'Because you can use it in this and this and this'."

The career education program followed at Frederick Junior High is divided into three parts. From kindergarten to the seventh grade is the awareness phase, helping students to "become aware of all the potential in this world." From seventh to tenth grade is the exploration phase, examining specific occupational fields. From tenth to twelfth grade is the preparation phase.

The main goal of this structure is to guide the students into a successful living experience, said Mr. Roy Atkins, Principal of Frederick Junior High School, Frederick, Colorado.

The delivery system for the career education program is a unit or concept approach. A team is formed of one teacher each from the areas of math, language arts, science, and social studies. They work together in an open classroom with 100 students. The team creates its own unit ideas to be developed through seven stages. Full development takes an average of three weeks, Ms. Vyduna said.

According to Ms. Vyduna, the first stage is an interdisciplinary tie that relates a unit to classroom studies. For example, the Spanish teacher emphasized agricultural words (tractor, cow, etc.) when the team was developing the farming unit. The second stage is bringing in resource speakers. The team invited a 4H club leader and an irrigation farmer to come and speak to the class. The third stage is role playing. Ms. Vyduna said this stage was easy since many students belong to the 4H club.

The fourth stage is gathering occupational information. Tying vocational interests in with the unit is the fifth stage. Hands-on experiences and field trips are the sixth and seventh stages. They are often executed at the same time, Ms. Vyduna said.

According to Mr. Atkins, the school has noted a definite improvement in students' basic skills. Achievement test scores increased 14.6 percent for the seventh and eighth grade students, he said.

Session 536
Career Education Practices:
Middle/Junior High School

Rotary Clubs Express Vital Interest in Career Education

The two mottoes of Rotary International—"Service Above Self" and "He Profits Most Who Serves Best"—help explain why Rotary Clubs in thousands of communities around the world are interested in young people and career education, according to Mr. James W. Nash, Rotary member from Mansfield, Ohio.

Mr. Nash and Mr. Charles Bradshaw, Rotarian from Corpus Christi, Texas, described the programs in career education their respective clubs have developed cooperatively with the Mansfield and Corpus Christi school systems.

Rotary, a service club founded in 1905, is made up of members from thousands of different occupations, Mr. Nash explained.

Rotary is interested in participating in career education for several reasons:

1. It is a service organization; everyone in Rotary wants to serve others.
2. Members have the knowledge of careers; they know what it takes to get into a career and how to progress and become successful.
3. Members realize a need for career education; most are family men and have youngsters making career decisions.

In Mansfield, Ohio, Rotarians participate in the Rotary Malabar career exploration project, a cooperative project with Malabar High School, one of two high schools in Mansfield.

The purpose of the project, according to Mr. James A. Tarantine, Supervisor of Career Development for the Mansfield schools, is to give a student the opportunity to spend at least one full day in the community with a person in an occupation in which the student is interested.

"The only way to teach a student effectively about an occupation is on a one-to-one basis with someone on the job," Mr. Tarantine said. "We use the Rotary Club because it is a resource bank of careers."

The Mansfield program begins each September when Mr. Tarantine's staff talks with the Vocational Guidance Committee of the Rotary Club to plan the school year's program.

In October the club sponsors a dinner in the school cafeteria for sophomore students, Rotarians, educators, and administrators to discuss the project and interact with each other on a personal basis.

Then Mr. Tarantine's staff talks with all sophomore students in their homerooms to make them aware of the project and encourage them to take advantage of it. During the following two weeks, students are asked to think about what careers they might be interested in and to discuss them with their parents, counselors, friends, and others.

A letter is also sent from the Rotary Club to parents explaining the project and asking them to discuss careers with their children.

At the end of the 2-week period, interested students are asked to complete an application listing three career choices. They are encouraged to list any information they feel is important for their visit experience;

they may name a particular plant or business or even a person they want to visit.

Mr. Tarantine said that during 1975-76, 85 percent of the 300-member sophomore class indicated an interest in the program.

The completed forms are then given to the Rotary's committee which has responsibility for scheduling the students to go out into the community. Every student is guaranteed at least one day and occasionally two or three visits are made by a student. Visits are made during January, February, and March.

At the end of March, an evaluation is completed by a sample group of students. They are asked to describe where they went, what they learned, what is good or bad about the program, and their recommendations for the program.

"We use students' ideas from previous years," Mr. Tarantine said. "We have made a number of changes in the program over the years, based on these ideas and suggestions from Rotarians."

Mr. Nash said that each professional participant is given a list of things to be included in his presentation to the student. Items include information regarding the job itself, its responsibilities, educational requirements, working conditions, earnings and benefits, and personal requirements.

The Wonderful World of Work program in Corpus Christi involves bringing over 400 professionals from occupations in the 15 occupational clusters identified by the U.S. Office of Education into the classroom as resource people, Mr. Bradshaw said.

He noted that workers from various areas are asked to complete a questionnaire indicating their desire to participate in the program and giving a synopsis of their personal experiences in the world of work.

These questionnaires are included in notebooks and distributed to all teachers in the school district to assist them in bringing these resource people into their classrooms.

The local Rotary Club is responsible for soliciting the questionnaires and compiling the notebooks, Mr. Bradshaw said. The guide is used by teachers at all grade levels in the district.

Mr. Nash concluded the presentation by relating that in addition to career education projects in hundreds of U.S. cities, Rotary Clubs are participating in such programs in places like Bombay, France, Hong Kong, Rio de Janeiro, Australia, the Philippines, Israel, Canada, Mexico, Japan, and Burma.

Session 537
Rotary International and Career Education

Labor Department Funds Occupational Information Systems

Through research and development grants, the United States Department of Labor is participating in career education, according to Mr. Steve Wall, Assistant Director, Washington Occupational Information Service, Olympia, Washington.

At present, several States are developing occupational information systems which provide information on career possibilities to people ranging in age from grade school students to adults.

Mr. Wall noted that the occupational information systems of the different States involve different methods of dispensing career information, but the basic operation is the same. Through questions answered by the career seeker, a variety of career options are presented to the applicant.

For example, according to Dr. Bruce McKinlay, Director of the Oregon Occupational Information Service, Oregon has two approaches to the information system. Based on users' answers to questions, information is presented either through a computer or through the "needle-sort" manual system in which the applicant inserts a needle through a stack of pre-punched computer cards, lifts the stack, and discards those cards which do not remain on the needle. On each card is printed a career field; the cards remaining on the needle present the fields complying with the answers given.

Dr. McKinlay commented that the system offers the career counselor a professional challenge.

"I think it is more useful than that type of system which uses individual files. It bridges the gap between data givers and data users," he said.

"The Oregon system is one of the few systems which has become a self-supporting reality," added Ms. Norma Ausmis, the Department of Labor's Chief of Technical Assistance and Training for the National Occupational Information Service.

Ms. Ausmis said the most recent Secretary of Labor dropped a few States from the program because they were not self-supporting. "Nevertheless," she commented, "we have no promises, but we think the future looks bright for expansion."

She added that the program is useful to both students and those seeking to reenter the job market.

Session 538
Career Education and the Department of Labor's Occupational Information System

Kentucky Legislature Passes Bill, Begins Implementing Career Education Program

"We should promote the idea that we have to work in our life and make an effort to relate our schools to life," said Dr. James Graham, Superintendent of the Kentucky Department of Education, Frankfort, Kentucky.

In a session on Career Education and the Legislative Process, four panelists from Kentucky described measures taken by the Kentucky legislature to implement career education in the Kentucky school system.

The discussion centered around the passage of House Bill 70 in 1976 and efforts to ensure implementation of programs required by the bill.

"The process leading up to the passage of House Bill 70 began in 1974 when an interim committee was formed to study possibilities for vocational education in Kentucky," Dr. John Alexander, Education Researcher, State Commission for Post-Secondary Education, Frankfort, Kentucky, said.

"One of the committee members realized that we should be preparing people to make a life and not just a living. This was a turning point for career education in Kentucky," he said.

The legislature passed the Life Education Act stating the goals of education and giving a career emphasis to the Kentucky system.

"A study had shown Kentucky to have the worst academic record in the U.S.," Dr. Alexander said. "Career education seemed to be a way to improve the system."

A subcommittee was formed to study career education and its recommendations led to the passage of House Bill 70, known as the Career Education Act.

The bill defined career education and called for its implementation in the Kentucky school system.

The four panelists were mostly concerned with making sure the demands of the bill are met by the school systems.

"Career education is everybody's business," State Senator Kenneth Gibson said. "We passed the bill, but it shouldn't end there. There has to be a follow-up to get the bill off the ground."

Ms. Dorothy Alexander, Director of Career Education for the State Department of Education, explained programs aimed at ensuring Statewide observance of the bill.

She noted that a special committee was formed after the bill's passage to develop guidelines for the implementation of career education.

This committee defined the roles that the State and local school systems should have in its implementation, she added.

The committee appointed local career coordinators and required each coordinator to submit an implementation plan before January 1, 1977.

Then a steering committee containing a cross-section of teachers and administrators was formed.

"The first effort of the steering committee was to go to leaders, superintendents, and principals," Ms. Alexander said.

She commented that it also sponsored a career education preview week through Kentucky Educational Television.

"The committee put together a package for in-service training and organized a number of in-service days funded by the State. We had to determine the qualifications of teachers for career education, and the in-service days helped them get ready for its implementation," she said.

"We are going to put all the emphasis we can on career education," Dr. Graham said, "and hope that the people are ready for it."

Session 539
Career Education and the Legislative Process

Indiana Finds Mobile Vans Useful in Career Education

The imaginative use of mobile units in career education was discussed by Dr. Gerald Dudley (Project Director, Indiana Career Resource Center, South Bend, Indiana), Ms. Gina Lubek (Indiana Career Resource Project, Evansville, Indiana), and Mr. Jim Coffey (State Superintendent, Indiana Career Resource Project, South Bend).

The trio noted that the program began approximately six years ago in Indiana and was based on the belief that mobile units could be used for career exploration, community education, multiple resource presentation, and aid to those in rural areas.

In Indiana the mobile units are used to transport career brochures and information to community meetings, as lending libraries, and as traveling placement centers.

According to Dr. Dudley, the vans are "33-foot moving billboards" for career education.

He noted that southern Indiana has two mobile units; one is part bookmobile, while the other is a modified mobile home. Each carries duplicates of over 5 percent of the available career education material in the State. These games, books, and pamphlets are distributed or kept on permanent display.

"Unfortunately we can't put 16 mm films on the van," he said.

"You can also use the mobile units as student and teacher resource centers," Ms. Lubek added. "They make excellent library vehicles and placement centers."

She noted that teachers can coordinate class instruction with career awareness materials available in the units.

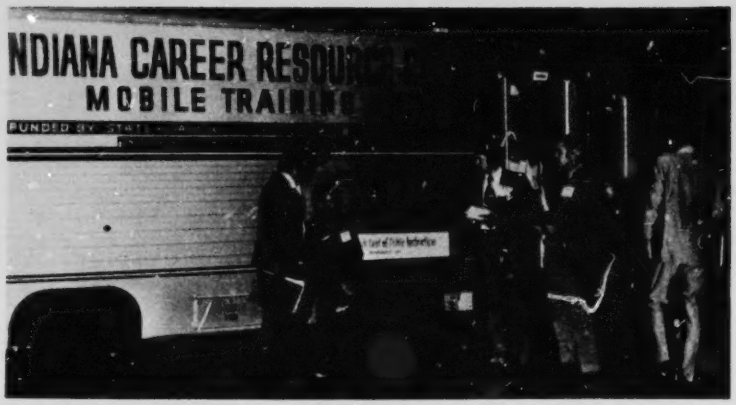
Presenters stated that to use the units effectively, students should be encouraged to have a specific idea of an area of career interest before boarding the van, and teachers should have some variety of in-service training to equip themselves with proper skills.

Mr. Coffey commented that vans can facilitate public relations about career education programs if vans are parked in the parking lots of large shopping centers.

Dr. Dudley stressed the need for a central coordinator for all mobile unit systems. He said that Indiana uses an invitation-only scheme and tries to advertise the oncoming visit of a career education van. Proper facilities for safekeeping are also needed, and he suggested that a community should be within 35 to 40 miles of a unit.

Four years ago a 33-foot unit cost $20,000; currently, one can be purchased for $35,000. These vehicles have the capability of carrying talking mannequins and slide projection.

Session 543
Mobile Units in Career Education



Participants gather in front of the Indiana Career Resource Center Mobile Training Unit, funded by the Indiana State Board of Vocational and Technical Education in cooperation with Indiana University at South Bend, Indiana.

Portable Career Education System is Designed for Rural Areas

A 16-handbook, portable career education system has been designed for use in rural school systems. The Comprehensive Career Guidance, Counseling, Placement, and Follow-Through System for Rural Schools was developed, using rural areas of Michigan, Wisconsin, and Ohio as a laboratory. Combining efforts on this project are the Center for Vocational Education, Columbus, Ohio; the Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison, Wisconsin; and the College of Education, Northern Michigan University, Marquette, Michigan.

Dr. Harry N. Drier, Research Specialist for the Center for Vocational Education, described the system. He noted that prior to the system's development, the team identified rural career education efforts in the three-State area and made a nationwide literature search.

"We found few studies that focused on rural areas which related to total rural populations, although there was substantial literature on migrant workers," he said.

Based on the groundwork, a state-of-the-art paper was written, looking at significant settings.

The rural career education material search yielded 1,500 pieces from which about 700 "effective" items were sifted and combined in a resources handbook.

Dr. Drier explained that the system consists of 16 handbooks; two are on counseling, and the rest are designed to fit varying types of rural communities. He noted that a "cookbook" manual for counselors is included, listing material available for different questions. There is also a subject handbook answering such questions as how the attitudes of career education can be taught. Activities in the home, in community-based organizations, and around the school which have a focus on career education are suggested. One handbook deals with community relations. The last book in the series is an evaluation report.

"The need for this portable, 16-book system is pointed up by the fact that more than half the rural schools in the United States have no guidance counselor," Dr. Drier stated.

He commented that the system is designed so that principals of rural schools can "handle the guidance job," in the absence of a guidance counselor. The handbooks indicate what can be done by non-counselors and what must be handled by counselors, he added.

Among ideas growing out of the study were the following: convert an old school bus into a traveling guidance center; create a student-run, part-time job placement center for summer jobs; provide in-service training for teachers to become trainers of others.

Dr. Drier stated that rural school systems can now find funding for career education programs due to the signing of the Education Amendments of 1976. He said that money is available for in-service and pre-service training, placement, materials, research, follow-through, and other career education areas.

He concluded by saying that the Comprehensive Career Guidance, Counseling, Placement, and Follow-Through System for Rural Schools has been pilot-tested in the three-State area and is being field-tested throughout the United States for an 18-month period.

Session 550
Career Education Practices: Rural K-12 Settings

New Yorkers Discuss Career Education in Large Urban Areas

"If it doesn't happen in the classroom, it doesn't happen," said Dr. David A. Bickimer, Project Director of the Development and Implementation Unit, Center for Career and Occupational Education, New York City, in speaking of the necessity of educating teachers to the world of work so they can educate their students.

He defined career education as the fusion of academic and vocational instruction and said that it uses community and business resources for guidance and instruction.

"Teacher education is the name of the game for implementing career education in the schools," he said.

Dr. Bickimer spoke of the Systemwide Career Education Cluster-based Articulated Model Program (SCECAMP), developed by the Center for Career and Occupational Education (CCOE) in Brooklyn, New York, and discussed the model sites in three different boroughs of New York City.

Mr. Michael J. Racanelli, Director of the SCECAMP program, explained that SCECAMP is a model program to infuse career education into elementary, junior high, and high school curricula. He explained that Manhattan, the Bronx, and Staten Island each had a model site as an example of how career education could be implemented.

"SCECAMP went into the schools for in-service workshops and found a lot of support from the high school teachers," he said.

Noting that an attempt was made to fuse academic and vocational instruction in the program, he called the sites "a system in each borough of the community that people from the private sector can view" and mentioned that conferences are held to share program experiences.

Mr. Racanelli explained that curriculum for grades K-12 with a career focus is being developed by the SCECAMP program.

He told participants that the manual *Implementing Career Education*, published by the Office of Education, is used in the in-service workshops for teachers and guidance counselors.

He noted that the manual defines infusion as a curriculum development concept that integrates set career education objectives and content with the current goals and content in schools.

Mr. Racanelli emphasized that career education is not a separate curriculum, but is achieved by reorienting the existing curriculum.

Dr. Bickimer said the Center for Career and Occupational Education collaborated with four universities to sponsor in-service training sessions for teachers in order to gain a working knowledge of the process of infusing career education into the existing curriculum in schools.

Ms. Pauline Regina Jones is the Staff Development Director for the in-service workshops. She explained that the first session begins with a statement of objectives for successive sessions.

"The goal of the sessions is to give teachers, guidance counselors, and school administrators the skills and processes of integrating career education into grades K-12," she said. "We use all the resources available to us, particularly the business community."

Ms. Jones commented that instruction in the workshops is performance-based. She said that the role of the sessions is one of coordination with the schools rather than domination.

Dr. Bickimer explained that the credit hours offered to teachers for participating in the program can be counted toward a master's degree. Four universities offer undergraduate or graduate credit for working with the career education program, he said.

Dr. Bickimer said he felt that the program has good cooperation now, but that motivation of the teachers is the biggest issue in the years to come.

"Basically this is a program to educate teachers to the world of work so they can in turn educate their students," he concluded.

Session 552
Career Education Practices: Large Urban K-12 Settings

Presenters Call for Overcoming Sex Role Stereotyping

Ms. Susan Groves of Berkeley, California, and Mr. Theodore Woal of Philadelphia, Pennsylvania, made a presentation investigating the ways in which students learn sex roles and provided practical strategies for overcoming these stereotypes in the classroom.

Ms. Groves is the Coordinator of the Women's Studies Program in Berkeley as well as a teacher and administrator. She expressed deep concern for career education in regard to two particular problems—the "underutilization" of the talents of 51 percent of the American populace and discrimination on the basis of sex.

"I think that, as educators, we need to alter our assumption with regard to women and work," she said.

She cited a 1972 study done by Women on Words and Images, Princeton, New Jersey, on sex role stereotyping in children's readers, entitled *Dick and Jane as Victims*. In this study, it was determined that for every five boy-centered stories, there were only two girl-centered stories; that there were three adult male main characters for every female main character; and that for every two male animal stories, only one female animal story existed.

She mentioned that the 1972 study also revealed that while 147 careers were available to men, only 26 such careers were attainable for women.

In Ms. Groves' opinion, "Clearly these jobs were available on the basis of sex and race, rather than on potential."

In a slide presentation compiled by Help Wanted in 1975, Ms. Groves pointed out four major issues at hand concerning sex role stereotyping: portrayal of career options; the link between early sex role stereotyping and career options; the allocation of positions with power, high pay, and prestige; and the message given

to students on combining work with family responsibilities.

"All of these issues play an important part in the formation of a child's attitudes and aspirations for the future," she said.

Commenting that one does not often see a female fire fighter or a male secretary, she contended that accordingly, not many girls aspire to be fire fighters or boys want to learn secretarial skills.

"In career portrayal, there are many more exciting, unusual, and fulfilling career options for men than for women," she said.

Ms. Groves noted that men are encouraged to obtain positions of high prestige and often find doing so easier and more socially acceptable than would a woman.

"Women are discouraged when trying to combine work with family responsibilities, while the male populace dominates the working world. As fathers, do men not share family responsibilities?" she asked.

Concluding that there has been little change in sex role stereotyping in the past three years, Ms. Groves called for action to be taken.

According to Ms. Groves, "Stereotyping does destructive work on kids and kids do not have role models or information needed for their aspirations."

Working under the assumption that career education materials do not differ significantly from children's readers as far as sex roles are concerned, Mr. Theodore Woal, Supervisor of the Room to Grow program in Philadelphia, next emphasized the necessity for teachers and administrators to create their own materials and texts. In the Philadelphia program, one strategy used to combat sex role stereotyping is to show a group of students a set of 150 slides depicting work settings without people and then ask the students whether one particular job is geared more toward men or women.

In conclusion, both presenters agreed that sex role stereotyping should be done away with.

Session 604
Overcoming Sex Stereotyping in the Elementary School

Mr. Abe Friedman, Assistant Superintendent, Los Angeles Unified School District, Division of Career and Continuing Education, makes a point at the California State caucus.

Mr. Don Vandegraft, District Sales Manager from Claremont, California for the McKnight Publishing Company, explains some career education materials to participants.

St. Louis Staff Use Games to Teach Career Education Concepts

If you were to take a person on a safari with you, would you prefer him/her to be intelligent, personable, or sexy? If you were president of a food distributing company and there was a shortage in the community, who would not receive food? What does a kiss setter, banana spotter, frog shaker, or any other member of a rare profession do?

Five members of the St. Louis public schools career education staff organized a group of games and puzzles to teach career education concepts during a session on The Elementary Teacher in Career Education.

Their contention was that the effectiveness of teaching is ultimately determined by its involvement with students' existing lifestyles. According to their "occupational passport" pamphlet, "real education must touch the lifestyle and at least present the possibility for the student to change it."

Ms. Doris Benning and Ms. Roberzene Price, Elementary In-Service Coordinators; Ms. Susan Katzman and Ms. Theresa Stockman, Secondary In-Service Coordinators; and Ms. Marie B. Burrow, Director of the career education staff, organized the presentation as a safari through the "jungle of career information" All of the games presented were adaptable for use in teaching elementary school students.

The demonstration included values clarification through group discussion on tools needed for jungle survival and an auction of values to show individual variations in value assessment. The participants also played a value voting game about women in the world of work.

In a section on Career Town, career awareness was infused into the

basic English curriculum with word search and compound word games. A third section of the safari emphasized teaching the consequences that job choice has for the family, home, and community.

Session 606
The Elementary Teacher in Career Education

Counselor Educators Seen as Change Agents for Career Education

"Counselors need to be reinstated as members of the educational team and not treated as an isolated unit," said Dr. Eldon Ruff, Professor of Education, Indiana University, South Bend, Indiana. He added that the counselor's role in career education should be one of ongoing guidance, not only of individuals but of curriculum development as well.

Counselors can and should be influential as change agents, according to Dr. Ruff. Noting that traditionally counselors have had to help students adjust to whatever curriculum was available, Dr. Ruff said that counselors should urge changes in curriculum to meet the needs of the students served by the school.

"Career guidance is only one of the responsibilities of school counselors; however, it is becoming increasingly important," he said. "It can no longer consist of a career day held for high school seniors. It must begin early in a child's education and continue throughout his/her adult life."

Dr. Ruff noted that this expanded role of the counselor educator will cause his/her greater involvement in the overall educational program. He stated that the counselor educator must share knowledge with others involved in promotion of the career education concept and must become involved in the broader environment by talking to business, industry, and professional people and providing to students the information and advice they can offer.

Dr. Ruff acknowledged that school administrators and personnel may need to redefine the role of the school counselor.

"In many instances, counselors have become errand boys for the principal and their real responsibilities have either been overlooked or, at best, pushed aside for duties such as ticket selling, ring selling, or yearbook sponsoring," Dr. Ruff said.

Commenting that career education is the most feasible framework for providing career guidance, he said that to work effectively within that framework, counselors must be allowed to assume their guidance responsibilities. He stated that counselors should demonstrate competence in career and human development, consultation strategies, and curriculum infusion, as well as in other guidance areas.

Dr. Ruff listed six basic principles that should guide counselors in carrying out their responsibilities.

1. Career development is a lifelong process of self-development.
2. Career guidance should include opportunities to examine a variety of lifestyles.
3. Career guidance is a process of lifespan development, rather than a one-time choice.
4. Career guidance should encourage the management of one's own career and determination of the course of one's own future.
5. Career guidance promotes the concept of multipotentiality, thereby increasing available options.
6. Career guidance should involve a "commitment with tentativeness," based on a changing society and changing individuals.

Career guidance should prepare people to assume their own career management throughout their lifetime, he said. The principles of self-renewal outlined by Dr. Ruff provide guidelines for helping individuals to understand themselves more fully and to develop to their maximum potential:

1. Self-discovery and development of one's own potential never ends.
2. One must assume the burden of pursuing his own development.
3. One must know him/herself.
4. One must maintain the courage to fail.
5. One must have mutually fruitful relationships with others.
6. One must be highly motivated.

In summary, Dr. Ruff said that the counselor educator's role in career education is one of guidance of individual development and of total career education curriculum development.

Session 615
The Counselor Educator in Career Education

Wisconsin Schools and Job Service Cooperate to Set Up Job Placement Model

"The traditional concept of job placement is ineffective," Ms. Sue Kosmo said. "The new definition of job placement is a process of assisting students from their present career roles to their next career roles. Job placement should not be a slotting of students into specific roles; rather, it should offer multi-potential options for students," she said.

Ms. Kosmo, Research Specialist for the Vocational Studies Center of the University of Wisconsin, Madison, Wisconsin; Mr. Paul Speight, Supervisor of Special Projects and Vocational Education for the Wisconsin Department of Public Instruction, Madison, Wisconsin; and Mr. Pete Van Ness, Field Consultant for Job Service Wisconsin (public employment bureau), Madison, Wisconsin, described the Wisconsin job placement model at a session on Job Placement Practices in Career Education.

Quoting from a brochure about the program, Ms. Kosmo said, "This school-based placement system serves all students: college-bound, vocational, and general students. It coordinates existing school personnel and resources with extra school services for a comprehensive instructional, guidance, and referral system. The goals are to develop individual students' competencies and to improve the availability of placement opportunities."

Noting the necessity for such a model, Mr. Speight asserted, "Counselors do a fine job in placing students in higher education, but they don't do such a good job in placing students in jobs."

He said that the Wisconsin job placement program attempts to help students select clusters of similar jobs instead of just one job.

In the job placement program, Mr. Speight explained that it is the school's responsibility to give students the materials describing job-securing techniques. He added that it is Job Service Wisconsin's responsibility to find the job for the student.

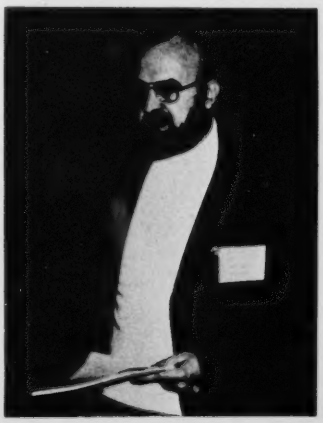
Mr. Van Ness said that the first thing that Job Service Wisconsin did was to hold a 2-day conference for business management personnel, high school counselors, and high school administrators.

One of the ideas emanating from the conference, he said, was that each school district should establish a job placement team. This team might be composed of a Job Service specialist, high school counselor, vocational education counselor, and interested teacher.

Activities of this team could include job placement, employability development, career counseling advisement, and employer/community relations.

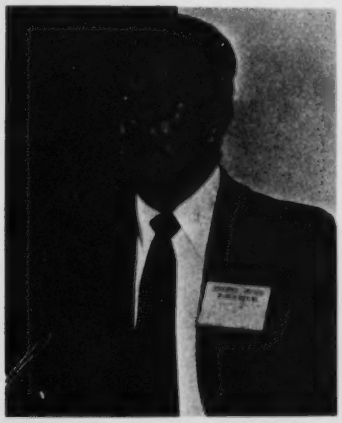
Mr. Van Ness emphasized that everyone on the team should be involved to some extent in each of the tasks.

Session 616
Job Placement Practices in Career Education



Dr. John C. Deutscher, Associate Professor of Counseling Education, University of Wisconsin-Stout, Menomonie, Wisconsin, in a session on The Counselor Educator in Career Education.

Ms. Jane Jackson, Counselor and Foreign Language Teacher, Scioto-Darby City Schools, Hilliard, Ohio, in a session on The Foreign Language Teacher in Career Education.



Mr. Weldon Griffith, Manager, Skyline Career Development Center, Dallas, Texas, in a session on Learning Centers and Career Education.

Arizona Directors' Association Sponsors Annual Career Education Conference

"The career education program in Arizona formed a directors' association to help staff members stay up-to-date with career education practices through a yearly State conference," said Dr. Jerry Booth, Chairman, Arizona Directors of Career Education and Director of Career Education, Nogales, Arizona School District.

He explained that the association is made up of the directors from each of 17 separate career education projects across Arizona.

"One hundred percent of our high schools and 91.8 percent of our grade schools participate," he added.

The association, which became an official State association three years ago, sponsors an annual Statewide conference to provide in-service help for its staff members.

Dr. Booth stated that the conference last year had 420 staff members, legislators, administrators, and counselors in attendance. He added that the 2-day conference cost the association about $25 a day per person and was funded through the State legislature.

"The conferences are not to sell career education, but are designed to keep people already working in career education informed of current developments," Dr. Booth said.

For example, during the conferences staff members are taught how to write proposals to the State legislature for funds.

"Every one of the State's projects holds a session at the conference," he said.

The association also buys television and radio advertising for career education and retains a public relations person who collects and disseminates material for brochures.

Dr. Booth has written an outline on Developing and Implementing a State Career Education Conference. For information, write him at 402 Martinez Street, Nogales, Arizona 85621.

Session 618
State Education Agency Personnel in Career Education

Venn Emphasizes Importance of Informed Leadership in Infusing Career Education Into School Systems

"My message to the administrators is that you personally have to make a choice and think through a process to give direction to career education," said Dr. Grant Venn, Professor of Education, Georgia State University, Atlanta, Georgia.

In a session on The Superintendent in Career Education, Dr. Venn emphasized the importance of an informed leadership in the infusion of career education in the school system and outlined five steps to implement career education.

"Leadership by the administrators is all important," he said. "The leaders of a school district have to be involved if career education is going to be successful."

According to Dr. Venn, people must first prove to their superintendent that career education "helps to truly educate children," and that "it is the only thing that can save the school system."

The most important person for the superintendent to work with is the principal, Dr. Venn said, and the first effort should be to inform the principal of the importance of career education.

"If you try to start career education at a school and no one knows what career education is, the program will never get off the ground," he said.

Dr. Venn contended that the superintendent's job should be to organize workshops and seminars for both the principals and the teachers.

"The administration must have a clear understanding of a need for career education infused throughout the entire system," Dr. Venn said.

He listed the following steps which superintendents should take to implement career education in school systems.

1. The superintendent should get the leaders interested and encourage them to cooperate in a career education program.
2. By organizing workshops and seminars, the superintendent has to inform the principals.
3. He or she must adopt a plan of action and develop a program.
4. After a program is developed, the superintendent must work to involve teachers, employers, and unions to facilitate the program.
5. The superintendent should set a specific date for an evaluation of the program to see if it is working properly.

"Usually, part of the plan is not going to work," Dr. Venn said, "so change will be necessary. The school system no longer applies. It needs a change, because it was designed for an agrarian, stable society—the opposite of today's society. If career education is going to be a success, we have to change the attitude of administrators," he added.

Dr. Venn concluded by saying that people have to point out the faults of the school system and push for change.

Session 619
The Superintendent in Career Education

Piedmont Project Stresses Community Involvement

The Piedmont Project in Greer, South Carolina is one of five experimental school system projects funded by the National Institute of Education (NIE) in 1972.

Ms. Eileen Robertson, Commercial Instructor, University of South Carolina, Columbia, South Carolina, and Mr. Ron Davidoff, Director of Secondary Education, Stow City Schools, Stow, Ohio, described the program.

The project is in its third year of operation and involves approximately 4,500 students in six elementary, one middle, and one high school. The career education staff includes a coordinator, seven paraprofessionals, and six guidance counselors who meet on a weekly basis.

Project goals and objectives were based on priorities identified by more than 2,000 citizens prior to funding in 1972. Progress is monitored by a cooperative board, made up of local citizens' groups, which were organized to assist the project in implementation and evaluation of the goals. Among the organizations involved are students, teachers, educational interest groups, PTAs, community organizations, and church groups.

Each school has a parent advisory committee and a battery of volunteers who assist in the career education hands-on projects as well as tutoring.

All schools, including the high school, have individualized instruction. Instructors are assigned to approximately 30 students for whom they act as auxiliary guidance counselors. The teacher advisors oversee the attendance, the individualized academic and vocational progress, and the personal problems of their advisees. In addition, teacher advisors offer guidance in the areas of values, decision-making, interpersonal skills, occupational information, and study and listening skills.

According to Ms. Robertson, the career education staff assists instructors to infuse existing curricular offerings with projects, experiences, and activities that are related to the students' existing activities.

"I see this infusion as the most important task in starting a career education program," Ms. Robertson said.

Potential dropouts are identified in the fifth grade and placed in a special program that stresses remedial instruction, intensive guidance, and career exploration beginning at grade six. The program continues at the high school level, and students are encouraged to enroll in appropriate vocational courses.

A job placement office has been set up; and credit is granted for learning that occurs on a job, "whether it is for pay, love, or its own sake." Some examples of jobs held include tutoring at the elementary schools and working in an educational institution as an aide in yard work, the cafeteria, school plant repair, the library, or the office.

According to Ms. Robertson, the Piedmont Project is considered a success. She noted that the dropout rate has decreased from 51 percent to approximately 38 percent.

Session 620
Supervisors and Directors of Instruction in Career Education

Career Education Coordinators Provide Classroom/Teacher Support

According to Ms. Pam Serio of the Allegany County Board of Cooperative Educational Services, "The career education coordinator on a county level is both a swizzle stick, and a go-for: you mix the right ingredients and you go to help serve teachers."

Ms. Serio said she believes that a coordinator, whether on a local or a county level, should work directly with teachers. "A good portion of our program consists of teaching demonstrations, where we actually work with the teacher in the classroom for three to five days and demonstrate the effects of career education on students," she noted.

Ms. Judy Johnson, Career Education Implementer, Mamaroneck School District, New York, emphasized the importance of career education in planning for the future.

"We firmly believe that the only way to prepare youngsters for a world that we cannot predict tomorrow is to ensure that our career education program makes them able to plan career goals for the future," she said.

Ms. Johnson expressed her definition of the role of a career education coordinator as "a total support system."

"We support teachers, administrators, the business-labor community; and most of all, we support the students," she said.

Identification of resources—the people, places, and things that are functional in the program—is the major concern of a coordinator, according to Ms. Johnson.

Ms. Johnson explained that in her program the career education process begins with infusion in the second grade and continues through high school. The four basic themes (career awareness, self-awareness, career planning, and career preparation) are infused throughout the program.

She stated that by incorporating the tools of career education into the necessary subjects taught in the classroom, she feels that career education enriches course curriculum.

When you ask teachers today to introduce career education into their curriculum, they are often concerned that they 'don't have the time'. This is where the support services are very important," she said.

Ms. Johnson mentioned that the definition of career education in the Mamaroneck School District is a broad one, due to broad-based needs.

"We are preparing students not just for the roles they play as employees, citizens, parents, and professionals; an important element of that is consumer education," she added.

One resource that the school district relies on very heavily is the liaison of business, labor, and industry. Ms. Johnson said she considers this one of the unique features of the surrounding suburban community.

"We ask every community helper to come in and not only demonstrate their particular skill, but explain who they are and why they chose their skill," she said.

She emphasized that activities in the classroom and community cannot happen unless the career education coordinator is continually involved with teacher training.

"Teacher training means examining and reexamining the teacher's objectives and goals and constantly asking, 'What do I want for my students? What is the relevance of what I am teaching in the classroom?' If we as coordinators are not there to provide the activities and support, then we are not helping teachers to answer those questions," she concluded.

Dr. Lawrence W. Aronstein, Elementary School Principal and former Career Education Coordinator, raised questions about the progression of career education during his three years of involvement in New York.

"Staff development, curriculum and resource development, and community interaction are sound measurements for career education programs," he said.

In defining the role of a coordinator, Dr. Aronstein said he asks, "What do we mean by leadership, and more specifically, what are leadership skills? How are these leadership skills unique to career education? Who should be doing what?"

Dr. Aronstein said he believes that finding the answers to these questions through analysis and practical research will lead to the coordination of effective leadership in career education.

Session 621
The Career Education Coordinator

California Career Development Center Attempts to Alleviate Community Problems

The Richmond Unified School District, Richmond, California, is in its second year of operating a Career Development Center (CDC) to help solve the unemployment problems of young people within the district.

Richmond is an urban district serving 35,000 students, mostly from the inner city area, according to Ms. Mary Jane Sheeran, Director of Secondary Curriculum and Career Education for the district.

"The number of minority students has been increasing steadily in our district during the last nine years," Ms. Sheeran said. "The majority of them live in the inner city and economically depressed areas with a high unemployment rate of 49 percent for young blacks. Eighty-five percent of the inner city population is black; the median income is $5,000; and 54 percent receive public assistance."

Ms. Sheeran said she believes this unemployment problem can be solved if it is "worked at in the right way." She noted that the district has developed an extensive career and vocational education program attempting to go to the heart of the inner-city crisis.

"Richmond has a good track record in this area," Ms. Sheeran said, referring to the Richmond plan for pre-technical education, FEST (Food Education and Service Technology), and the Richmond Flight Plan, all well known throughout the nation.

According to Ms. Sheeran, plans for CDC began in 1973-74 when the district put together funds for the project and a career development study committee was formed. She said that members visited career centers in other U.S. cities and did extensive research before recommending that a center be established.

In the fall of 1974, an experimental program began in five high schools involving 1,400 students. Following a year-end evaluation indicating the project was successful, the decision was made to continue on a district-wide basis.

The CDC is located in the Richmond High School building, centrally located in the district, explained Mr. Harold Holt, Assistant CDC Director and Instructional Vice Principal at Richmond High School. It is the newest and best-equipped high school in the district, built in 1970, and has the facilities necessary for the program.

The goals of the CDC are to provide each student with a high school diploma; to prepare each student to enter college, technical school, or other special job training; and to provide each student with a salable skill by graduation.

During its studies, the committee found that the number of jobs in skilled areas would be increasing more rapidly than in other areas and formed career clusters on this basis, Mr. Holt said. These clusters include: business and management services, food services, graphic communication, electronics, people care services, plastics technology, security services, transportation services, and world of fashion merchandising.

Participating students from around the district spend three hours a day in the CDC and are returned to their regular attendance centers for academic classes, or they may transfer full-time to Richmond High School.

Funding for the program comes from a variety of sources, as detailed by Mr. Earle Carr, Supervisor of Special Projects in Richmond.

"We have used some of our regular State and local tax money for the CDC," Mr. Carr said, "but the program costs much more than this."

The program's main source of funds has been State vocational educational monies, and three-fourths of the Vocational Education Act (VEA) Part D money goes into the program, Mr. Carr explained.

The district is also using VEA Part D funds for its Eureka program, a pilot computer-assisted career guidance system for the State of California. Richmond and several other districts have bought the program rights for the State and Richmond is localizing and updating the information now for its pilot program.

VEA Part G funds are used for cooperative work experience programs in five CDC clusters. Other CDC funds come from the Elementary-Secondary Education Act (ESEA), Title IV, Part B monies, Mr. Carr added.

The district has developed other special programs using Federal funds. The remainder of VEA Part D monies is used in a program for handicapped students.

Mr. Carr noted that the district has a contract with a local firm to do evaluation, special programming, and job development for handicapped students. The district supplies the instructor.

"Students receive rehabilitation counseling, earn money, and get a good background in production work," Mr. Carr said.

This program is also partially funded through State rehabilitation funds.

VEA Part A monies are used for disadvantaged programs, such as the Learning Center at Richmond High School. Established four years ago, the center is aimed at alleviating the problems students have in basic English and math. Special tutors were hired, TV equipment purchased, and computer-assisted instruction provided.

Other monies fund a job development program in the CDC. Special staff persons work with seniors on job applications and interviews, and tutor seniors to help them pass tests.

The district also utilizes Regional Occupational Program (ROP) funds from the county and State for special programs in occupational areas where the number of future jobs will be limited, as identified by the county. State money for gifted students is also applied to the CDC program, Mr. Carr said.

Session 623
Planning and Managing a Career Information Center

California Sponsors Career Education Master Trainer Program

In a session on Staff Development Practices and Programs in Career Education, Mr. Maurice Flora, Coordinator, Career Education, Charter Oak, California Unified School District, indicated to the audience that this session would be confined to a report on the California career education master trainer program. He told participants that the program was designed and implemented jointly by the California Career Education Unit in the California State Department of Education and the California Association of Work Experience Educators (CAWEE).

Mr. Paul Peters, Manager of the Career Education Unit for the California State Department of Education, described how the program began.

Noting that it was impossible for a staff of seven in the Career Education Unit to implement career education in a State of 20 million people, Mr. Peters related that the association was asked to assist in the development of an adequate delivery system. Plans evolved for joint workshops throughout the State to train cadres of 20 to 30 district level personnel to conduct school-site workshops on implementing career education practices at the local level. Mr. Peters said that teams of three CAWEE master trainers and one State consultant spend four days at the local site to conduct the workshops.

Mr. Peters noted that district superintendents are asked to provide release time for administrators, counselors, and teachers participating in the workshop. The Vocational Education In-Service Office provides travel and per diem incurred by team members. The districts are responsible for providing facilities and the Career Education Unit provides housing for team members and resource materials, he said.

Mr. Peters stated that "a low-cost effort is available to train master trainers who become practitioners and train cadres of staff in their districts."

Workshop participants, selected on the basis of their interest in and enthusiasm for career education, include students, teachers, counselors, administrators, business and community representatives, and parents.

Mr. Ken Futterer, Director of Career, Occupational, and Vocational Education, Milpitas, California Unified School District, added that in order to develop a definition of and goals for career education in a given district, workshop participants are divided into small groups. Small group discussions of individual definitions and goals are summarized and reported to the total group, and a common definition and consensus goals are evolved by ranking. Mr. Futterer noted that the use of small groups to develop definitions and goals helps develop a team concept.

Ms. Bobbie Stenton, Coordinator of Career Development and Work Experience Education, Marina High School, Huntington Beach, California, commented that the master trainer team meets with district administration planning teams to determine commitment, need, and anticipated outcomes. The team then designs and implements a workshop which will assist each district to meet its career education goals.

Ms. Stenton also discussed career education resource handbooks, and noted that a good resource handbook should contain a list of business and community organizations, the names of people in these organizations to be contacted, and a statement describing their area of expertise.

Mr. Homer Sweeney, Director of Vocational Education, Fremont, California Unified School District, remarked that teachers must devel-

op the skills to infuse career education into their own subject matter areas.

"The role of the administrator and teacher in career education becomes more and more that of guidance facilitator," he said.

Mr. Futterer said that career education is vertically articulated in grades K-12. Students are placed in decision-making courses, interests and aptitudes are combined and exploratory seminars are provided, and then students are involved in actual work experiences. He said that horizontal articulation is achieved by infusing career education into the standard curriculum.

Ms. Nancy Pequeno, Vocational Specialist, Regional Occupational Program, Sacramento, California Unified School District, commented that administrators, counselors, and teachers sometimes express concern that (1) career education implies a vast new body of knowledge that must be learned and added to the curriculum, or (2) either the materials available are not suitable or adequate for their particular needs or the material is simply overwhelming.

According to Ms. Pequeno, the task of the trainer is to demonstrate how to personalize materials by adapting or adopting existing materials.

Ms. Pequeno said she felt that the program must provide resources with which the staff is familiar and she added, "The program must have a delivery system and that delivery system is the set of teachers."

Ms. Jo Kohler, Coordinator of Career Education, Chaffey Union High School District, Ontario, California, was the last speaker in this session. She told participants about the action plan component of the workshop, which occurs during the afternoon of the second day.

"This is a time to regroup after having completed the components of the workshop and identified the commitment of the local district," she said. "Trainers must listen in order to get a handle on the needs of the local district."

She said that participants are asked to write down the steps that the district plans to take to implement a career education program. A planning timeline is then established for completion of objectives. She noted that the outcome of the action plan component is a group commitment to the proposed district direction in career education.

Session 524
Staff Development Practices and Programs in Career Education

Business-Education Alliance Arises From Student Unrest

Mr. Sigurd E. Jaastad cited students' disenchantment in the late 1960's and early 1970's as evidence of the need for a strong alliance between business and education, and noted that the Des Moines, Iowa Chamber of Commerce has established a Business and Education Alliance Committee to meet this need.

Mr. Jaastad, chairman of the committee, explained that students, particularly in higher education, were at that time disenchanted with government, business, education, and national institutions. Specifically, he recalled students' outspoken contempt for the "establishment values," destructive behavior to business property, and reluctance to participate in business or prepare for a business pursuit. Not only was business the focal point of student disenchantment, according to Mr. Jaastad, Personnel Supervisor for Northwestern Bell Telephone Company. He also said that business didn't view students as desirable employees, either. In short, there existed a growing schism between the two.

Mr. Monroe J. Colston, Manager of Urban Affairs for the Greater Des Moines Chamber of Commerce, explained that they had started with one school and one business and matched the shared interests, size, and character of the two. He called the Chamber of Commerce a "broker" between businesses and schools.

According to Mr. Colston, the role of the business in an alliance is to identify the needs of the school and provide the resources and expertise necessary to meet them. Educators must utilize the resources and channel them into career education objectives.

Speakers also noted that the business in an alliance provides to the school resource speakers who relate skills needed for given careers and make special presentations.

According to the presenters, the long-term return for business is that when students finish school and apply for jobs, they are aware of the skills they possess and the skills required by the job so they make fewer career changes within the corporate structure.

Session 626
Large Business and Industry in Career Education

California IEC Coordinates Efforts of Contributors to Career Education

Industry-education councils, involved in coordinating the career education efforts of business, industry, labor, and education, have established cooperative demonstration projects which pair industry with education.

One such organization, the Industry-Education Council of California, is doing this through several programs aimed at giving the student "how to" materials in career education.

Mr. Henry D. Weiss, Executive Vice President of the Industry-Education Council (IEC) of California, said, "We're trying to organize education a little bit. The educators have to come up with the basic prescription for education or else it's not going to happen."

Mr. Weiss noted that there were some initial difficulties in the program, but he said that the program has been a success in many areas.

For example, in one school district, the California

IEC was involved in helping students understand in detail the issues in California's proposition 15, the nuclear energy question.

"We talk to them of tradeoffs in energy. Unless we make commitments, for example, there will be no travel. Here, it's not just a career field, but also a matter of national policy," he said.

Mr. Weiss said that other programs in which the California IEC is involved include:

1. Development of career awareness simulation learning materials for junior high schools.
2. "Roadmap" materials for students and counselors on career education.
3. The Bay Area Cooperative Education Clearinghouse, which combines different industry and education forces and minimizes duplicated efforts in career education.
4. Work with the State Department of Education, California Community College Chancellor, and the Employment Development Department to help organize model manpower management information systems that will help counselors in occupational futures.

Mr. Weiss noted that the IEC is funded by different agencies, including the United States Office of Education, the California State Department of Education, and business and industry.

Despite the efforts being made, the organizers feel there is still the need for more.

Mr. Paul Peters, Director of Career Education for the California State Board of Education, said, "As we start to work on the infusion aspect, we have few State dollars. . .We need to bring in the other governmental agencies, and it can happen."

Session 628
Industry-Education Councils in Career Education

New York State Makes Commitment to Career Education

At one session of the Commissioner's National Conference on Career Education, members of the New York State Advisory Council on Vocational Education (NYSACVE) announced their commitment to career education as "the only effective means of relating the world of the classroom to the world of work."

The Council's statement comes from studies dating back to its formation in 1969, and is particularly important since, in the words of council Chairperson Ms. Annie B. Martin, "We are independent and equal to both the Board of Regents of the State of New York and the State University system."

The NYSACVE was founded to study changes in vocational education, and is appointed by the Board of Regents of the State of New York. Its members come from business, labor, education, and the concerned public.

None of the presenters at this session were career educators, but all have an interest in the field. Ms. Martin is the Director of the Occupational Safety and Health Labor-Management Training Program within the Health Care Institute. Mr. Lewis G. Harriman is a former chairman of the council and Vice President for Community Development with a Buffalo bank. Mr. David Smith is a veteran of the labor movement, and is presently heading the Apprenticeship Department of the Joint Industry Board of Electrical Industries. The three were introduced by Mr. Wallace Wog, who is Executive Director of NYSACVE.

According to Mr. Harriman, "The problem with vocational programs dealing only with job training is that they result in situations where high school graduates do not know what kind of work is available, how to fill out a job application, or how to look for work, and in many cases are not able to keep a job."

These failures have been addressed by the council through seven years of study which are now having their results felt throughout New York education.

A career education task force has been appointed for the council which recommended last year a comprehensive report on career education accepted by the Regents.

Mr. Harriman outlined the policy of the council as being "to assign a high priority to career education and reflect this in the budgetary process on the local as well as State level." He added that, "We simply cannot rely any more on Federal funding."

Mr. Harriman noted that the local boards need both the support of State leadership and up-to-date information on improved programming. For this reason, the NYSACVE has sponsored Statewide meetings for local boards to keep their momentum going "where it ought to go, to the students and teachers."

Mr. Smith's presentation dealt with the results of the council's work in moving career education out of vocational educators' hands and into the general education domain.

The NYSACVE also worked to create demonstration environments, rather than diffused programs. According to Mr. Smith, this "greatly assisted the cause of study and evaluation" of program effectiveness.

Session 631
Planning, Evaluating, and Expanding Career Education: A State Effort

Torrance Studies Gifted and Talented Students' Images of Future

"A 5-year-old child today will be 30 years old by the year 2001. These children will be growing up with the space age. They will have an image of the future that our generation can never attain," said Dr. Paul Torrance, head of the Department of Educational Psychology at the University of Georgia, Athens, Georgia.

The gifted and talented members of a society are the ones who mold its future. With this in mind, Dr. Torrance began three years ago to study the images of the future held by gifted and talented young students. Most of his data was obtained from 200 students who attended a 6-week program at the Georgia Career Institute, located at the North Georgia College, Dahlonega, Georgia.

The students participated in three exercises aimed at getting them to project into the future. In one exercise the students were told to write 20 questions that they would like to have answered about the future. The results of this exercise showed that the greatest concern was in the area of careers, Dr. Torrance said. Students also expressed concern about changes in government, lifestyles, and space research. However, little concern was shown for the problems of aging, welfare, poverty, or the third world.

In an exercise entitled The Future World of Work, students were asked to list which jobs they think will become obsolete and what new occupations are likely to be created. About 50 percent said that teaching will become obsolete, a finding which should be deeply noted by teachers and educators, Dr. Torrance said.

"Are these students saying that the dispensation of information can be done more efficiently or economically by computers?" he asked.

Other jobs projected out of existence were the farm worker, assembly and factory workers, and household workers. New occupations consisted of space personnel, nuclear plant workers, undersea architects, solar energy specialists, computer personnel, biochemists and genetic specialists, and space police.

A third exercise which concerned future career plans was presented in two parts. Half of the students were asked to write a scenario describing a sequence of events that might occur in a week or day of their life in the year 2001, Dr. Torrance explained. The other half were to write a soliloquy as if it were the summer of the year 2001. They were to describe how they felt about the accomplishments they had made and how the world had changed.

The results of this exercise showed a 54 percent majority projecting a clear image of the changes in self and the world. Of this 54 percent, 24 percent had a hopeful image of their future. Eighty percent of the women planned to have full-time careers. Dr. Torrance said there was a visible shift in concern from business and industry to research. Most of the students projected busy, hurried lives.

"In general, I found that students look very realistically at today's problems and limitations when they are projected into the future," Dr. Torrance said. "The challenge for career education leaders is to emphasize the best of students' and the best of mankind's achievements into future projections."

"The way students see their future can be related to their academic performance," he added. "Educators must get involved to improve students' future images. Too many students see no meaningful relationship with the future and what they are asked to learn in school."

Session 632
Career Education: The Gifted and Talented

Field Trips Help Overcome Barriers Between Adults and Children

Getting the most out of field trip experiences was discussed at a session chaired by Mrs. Bessie Etheridge, Director of Career Development, Office of Career Development, Washington, D.C. public schools.

Mrs. Etheridge has worked with career education infusion in the elementary school program in Washington, D.C.

Discussing the K-6 program, she noted that it combines self-awareness–helping children learn to like themselves and find their own productivity and worth–and community awareness–integrating the young into community activities. She said the program also stresses economic awareness and encourages the attitude that work is a normal part of everyone's life.

According to Mrs. Etheridge, career education in the elementary school is built on five concepts: (1) there is dignity in all work; (2) the life of a culture depends upon its workers; (3) there are various kinds of work available; (4) mankind uses tools for work; and (5) work has rewards.

Mrs. Etheridge said that field trips add another dimension to what the teachers do in the classroom.

She stressed the importance of planning ahead and said the teacher should be responsible for choosing and investigating the site in advance to become familiar with the place to be visited and know the things to look for.

She suggested that the teacher and class make a list of the things they expected to see on a field

trip. She also advised the teacher to teach the class how to do an interview.

"Talking with adults and asking them about their jobs helps in overcoming the barriers that exist between the adult world and children's world," she said.

Other tactics she recommended were gathering information about the place to be visited before the trip was taken and discussing the social responsibilities of each student and the safety rules that needed to be observed.

The follow-up for the field trip would include gathering more information to answer new questions that the children might have as a result of the experience, and using the experience to correlate classroom learning skills with the skills observed at the site visited.

Mrs. Etheridge explained that field trip experiences and follow-up make many of the things learned in textbooks become real for children because they see, hear, and experience them.

Session 636
Career Education and the Field Trip (Grades K-6)

Alice Promotes Use of Self-Awareness Learning Packets

The Alice, Texas Independent School District (AISD) consists of seven elementary, two middle, one junior, and one senior high school.

In a session on Individualized Instruction Practices in Career Education, Mrs. Maxine Walker, Consultant Coordinator to the AISD, said she wants to teach students to "be the best of whatever they are." She noted that through the use of study units and self-awareness packets, students in the AISD learn more about themselves.

"The packets help students analyze their values, learn about ways to improve their skills in working with other people, and learn how to solve problems they may have," she said.

She told participants that students are encouraged to write about their "favorite things and people," including favorite subjects, sports and games, television programs, foods, jobs, rules, community citizens, American people, and character traits. These "favorites" give students definite self-awareness, she stated.

She also noted that the AISD program is concerned with positive resources, such as pleasing appearances; ability to talk to others; sense of humor; ability to build and fix things; ability to get along with others; and reading, math, or artistic ability.

"These resources help students to be successful in school or on a future job, and may help them to have interesting hobbies that will give countless hours of pleasure," she said.

Mrs. Walker offered six steps to problem-solving: state the problem clearly, list obstacles, list positive resources, list possible solutions, analyze solutions, and decide what is the best individual answer.

She concluded by noting that the AISD stresses the value of learning resources, setting up career education centers, discussing the teacher's role in career education, and using pre-tests to give advance preparation.

Most important, Mrs. Walker said she tells Alice Independent School District students to "think positive thoughts and be a positive person."

Session 640
Individualized Instruction Practices in Career Education

Sisk Stresses Values Clarification for Gifted and Talented

In a session on Career Education for the Gifted and Talented, Dr. Dorothy Sisk, Director, Office of the Gifted and Talented, U.S. Department of Health, Education, and Welfare, Washington, D.C., spoke about the importance of values clarification for gifted and talented students.

Dr. Sisk said she felt that the role of the teacher of gifted students should be one of a facilitator rather than a teacher, and that these teachers should (1) help students clarify what they want to learn, (2) help students find the personal meaning of what they learn, (3) help students arrive at suitable learning activities and use suitable materials, and (4) maintain a psychological climate that nurtures the process of learning, encourages trust and sharing, etc.

She stressed that often a useful technique for facilitators working with gifted students (known as boundary breaking) is to "become one with the group," for example, by having everyone (including the facilitator) sit in a circle.

"The circular situation tells them who is the next person to speak," she said. "It is a modeling learning kind of posture, and the facilitator is telling them the importance of listening."

She also stressed the importance of starting off with innocuous, nonthreatening discussion and gradually asking questions which get students to discuss themselves.

Dr. Sisk cautioned that teachers must be careful about hypothesizing and must remain nonjudgmental in such boundary breaking sessions.

She also discussed the use of encounter lessons in which the teacher helps students (1) think about who they are and what they can and ought to do, and (2) feel valuable and worthwhile.

Dr. Sisk described the elements of encounter lessons as selecting a title (she suggests something humorous); setting the stage; asking leading questions; relating to other feelings; reacting and responding to feelings; encouraging creativity; and motivating abstract thinking.

Using conference participants as subjects, she demonstrated several examples of boundary breaking and encounter lessons, and then divided the session into small groups to create their own lessons.

Session 643
Career Education for the Gifted and Talented

Media Turns Career Education Into Political Issue in Raleigh

"The news media has been influential in the fate of career education in North Carolina," said Dr. A. Craig Phillips, North Carolina's State Superintendent for Public Instruction.

"It was used by a few people to show that career education was a piece of mediocrity," he added.

Dr. Phillips, a supporter of career education, said his job is an elected position. He indicated that this fact was the cause of career education's faltering in North Carolina.

"In the election year, career education was used by my opposition as evidence that those in a leadership role, meaning me, were anti-academic," he said.

This allegation came from Raleigh, the State capitol, where the news services (AP and UPI) are, according to Dr. Phillips. It did not come from the small-town news media which were largely in favor of career education, Dr. Phillips added.

"Editorials and news stories issued from Raleigh were used consistently to downgrade career education. They said we were trying to put vocational training above academic training," he stated.

A sequence of events, beginning in 1972, climaxed in the allegation and the elections of 1976 when Phillips was reelected to his State Superintendent position by 66 percent of North Carolina's voters.

In 1972, Dr. Phillips' office began working with career education. The State Board of Education adopted a resolution approving career education and calling for a task force to begin building a career education program using State and Federal money, Dr. Phillips said. Controversy grew when questions arose over the leadership of the program, he added.

The board declared, through several of its actions, that "we think we're on the wrong track," Dr. Phillips said. This provided a stimulus for the press to begin attacking career education and indirectly attacking the State Superintendent as a supporter of career education, according to Dr. Phillips.

"The criticism became so strong that the board finally rewrote career education policy to narrow its range," Dr. Phillips said. "It became so sensitive we just stopped talking about career education during the election. It was just too controversial an issue," he added.

To correct this and to get positive things about career education in the media, career education supporters must get editors and other people in the media involved inside the schools and with career education, Dr. Phillips said.

The media is important because it informs parents who send children to school and who send elected officials to State capitols. These parents must clearly understand career education and its impact on their children, Dr. Phillips added.

Session 644
Career Education and the News Media

Training Module Teaches Decision-Making in Hilliard, Ohio

The importance of understanding the facts of decision-making was stressed by Dr. Susan Jones Sears, Career Education Director, Scioto-Darby City Schools, Hilliard, Ohio.

"Making people aware of alternatives is not enough," she said. "Good information is not enough. You still have to decide, based on information you have about yourself, plus what you hope for the future."

Dr. Sears emphasized that decision-making is not new.

"Economists and other professionals have used it for years," she said, "but as a skill for individuals in a career education setting, as a method to help people to get from where they are to where they want to be, it is innovative."

Commenting that decision-making can be learned at any age, Dr. Sears contended that individual freedom depends upon competent decision-making.

"Freedom means *ability* to choose, as well as *permission* to choose," Dr. Sears pointed out.

In teaching this ability to make decisions, she noted that the individual must first be made aware that he/she has a choice. She added that it is important to recognize the conditions of making decisions: change, uncertainty, and limitations (both personal and environmental).

"A decision should be made by the individual, for the individual. It should answer the question, 'What's best for me?' and not 'What's best for the universe'?" Dr. Sears said.

Next, Dr. Gordon Miller, Program Service Officer, the College Entrance Examination Board, New York, New York, presented a model of decision-making. In such a model, he said that the individual finds himself in a *decision-making setting;* that is, she/he is under pressure to decide a certain way according to beliefs, mores, peer pressure, etc. According to Dr. Miller, the individual will arrive at his *critical choice* by values (What is important? How important is it? What do I want?); information (Do I know the alternatives? What are the outcomes of the alternatives?); and strategy (How probable is it? How desirable is it?).

"The statement, 'There is no alternative,' is always suspect," said Dr. Miller.

He noted that there is practically always another alternative, in all choices, and sometimes more than one.

"Don't go to college because you feel a lot of pressure to go to college," he said. *"Make it your choice.* Don't be a homemaker because you have a lot of neighbors who are homemakers. *Make it your choice."*

"If a youngster says, 'This is important to me'," he went on,

"don't present to him a world where he has no alternatives."

In Dr. Miller's opinion, strategy is risk-taking.

"A risk is neither good nor bad; it is simply a known probability of something occurring," he explained. "Decision is taking action. Outcome is the result of that action."

Dr. Sears conducted a demonstration of decision-making using her decision-making training module, which is used in the career education program of the Scioto-Darby City Schools. It is based on the College Entrance Examination Board model and materials, "Decisions" and "Outcomes."

"Once students learn the decision-making model," she said, "they can apply it to their own decision-making situations."

Session 645
Career Decision-Making Programs

Maryland Takes Steps to Infuse Career Education Into Curriculum

The process of infusing career education objectives into the school curriculum can be applied to any school system, said Mr. Robert V. Jervis, Coordinator of Career Education, Anne Arundel, Maryland public schools, as he discussed a Maryland program for curriculum infusion.

"The infusion process involves awareness, exploration, and preparation for teachers and counselors. The initial step involved hiring full-time resource teachers to work with subject teachers in adjusting their role to include career education," he said.

Mr. Jervis noted that the Resource Office sets up tours and provides pamphlets and additional information for teachers.

Mr. Robert S. Smith, Social Studies Teacher, MacArthur Junior High School, Fort Meade, Maryland, explained the functions of the Resource Office.

"Together with counselors and teachers, it strives to change the curriculum so the students know why they have to learn a certain subject," he said.

Mr. Smith noted that teachers use activities and worksheets to relate the subject matter to practical situations.

"Once the curriculum area is focused on a specific subject, the teacher states the purpose of the unit. A selection is then made of a career education objective for the grade level. Lessons are conducted and learning activities are practiced so that students understand the unit objective," he said.

For instance, one activity in the social studies field could be to hide an item somewhere within the school and draft a map to the hidden location. The students can then follow the map in an attempt to locate the item. If the location cannot be found, a discussion of the problem and reasons for using maps properly can take place. The teacher can then list people who use maps in their work and explain their value when used properly.

Ms. Nannell Grube, Counselor, Anne Arundel County public schools, Millersville, Maryland, discussed the nontraditional role of the resource counselor in curriculum infusion with career education.

In her program, she noted that workshops and in-service programs were designed to train counselors in working with teachers.

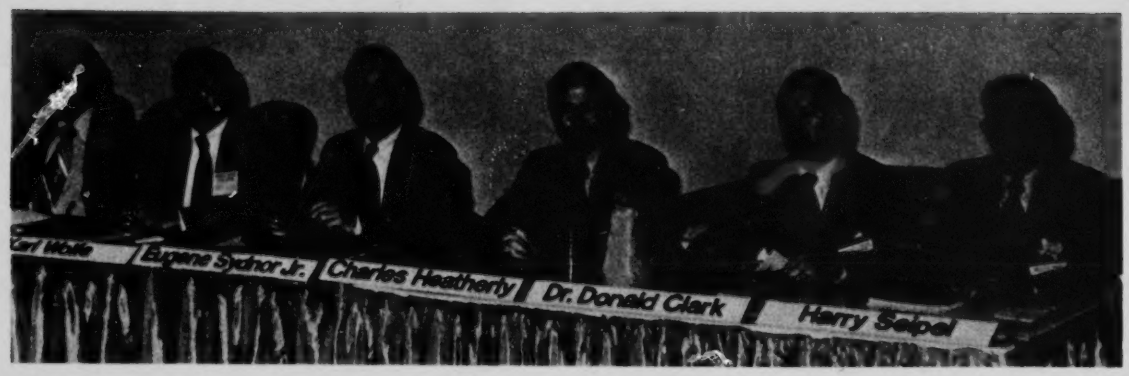
"The counselor becomes a coeducator in this process and works with teachers directly in the effort to become knowledgeable in career education theory, concepts, and methods of implementation," she said.

Session 651
Curriculum Infusion Approaches to Career Education (Grades K-12)

Handouts are discussed at the Minnesota State Department of Education exhibit.

Ms. Ofelia Sealey, Coordinator, Bronx Career Counseling and Resource Center, Bronx, N.Y., in a session on Planning and Managing a Career Information Center.

Presenters Explore Role of National Business and Industry in Delivering Career Education



In a session on Delivering Career Education Through National Business and Industry Organizations, presenters are, from left, Mr. Shane White, Human Resources Manager, U.S. Chamber of Commerce, Washington, D.C.; Mr. Karl Wolfe, Director, Health Manpower Development, National Health Council, Inc., New York, N.Y.; Mr. Eugene B. Sydnor, Member, Education Committee, U.S. Chamber of Commerce, Washington, D.C.: Mr. Charles Heatherly, Education Director, National Federation of Independent Business, San Mateo, California; Dr. Donald M. Clark, President, National Association for Industry-Education Cooperation, Buffalo, N.Y.; and Mr. Harry Seipel, Manager, Personnel Training, Brown & Root, Inc., Houston, Texas.

In a session on Delivering Career Education Through National Business and Industry Organizations, Mr. Harry Seipel, President of the Houston Chapter of the American Society of Training and Development, and Manager, Personnel Training, Brown & Root, Inc., Houston, told participants that the society is a nonprofit organization with 90 chapters and about 10,000 members nationwide. One of the society's major goals is the promotion of educational programs and services, according to Mr. Seipel. Members of the society are involved in many areas of business and industry; programs include sales and management training, organizational development, and community development as well as international training and development. He said the society is eager to help promote career awareness between business, industry, and education.

Dr. Donald Clark, Executive Director of the National Association for Industry-Education Cooperation (NAIEC), Buffalo, New York, spoke next. Dr. Clark stated that the NAIEC works to bridge the gap and develop a partnership between the marketplace and education, and expects a payoff on the local level, for teachers, counselors, and those in business and industry who cooperate with the educators. He noted that through industrial-educational cooperation at the local level, new resources can be put into place, and curriculum, materials, and staff development can be increased.

In this respect, Dr. Clark continued, the industrial-educational cooperation movement has been a "movement in search of a cause"; this cause has now been found in career education, where the payoff for such cooperation is found in the greater degree of smoothness with which young people make the transition from school to the world of work. According to Dr. Clark, the NAIEC stands ready to assist communities to get decision-makers together to form councils, and sees business, industry, government, labor, and education working in alliance to attain the objectives of career education—career guidance, staff training, job awareness, and job placement.

Dr. Clark also said that the NAIEC sponsors community resource workshops on college campuses to encourage the understanding of the local economic base and the resources available, and to provide an opportunity for educators to go on-site to increase their understanding and utilization of the available resources in the community.

The capstone of the programs sponsored by the NAIEC, Dr. Clark concluded, is in the area of job placement. The industry-education councils, community resource workshops, job placement services, newsletters, and a number of other activities are components of the strong alliance between proponents of career education and those involved in industry-education cooperation.

Mr. Charles Heatherly, Director of Education, National Federation of Independent Business (NFIB), San Mateo, California, was the next to speak.

Mr. Heatherly outlined eight propositions in relation to the role that businesses and national business organi-

zations might play in career education:

1. A central role for national business and industrial organizations is seen as crucial, despite the fact that career education is implemented on the local level, since local businesses will look to the national level for leadership.
2. National organizations cannot be delivery vehicles for career education, as that must be done locally; their role must be unique, not a duplication of local roles.
3. National business organizations must endorse career education and serve as examples to local organizations. They must make an effort to share, both with each other and with the local people, and must collaborate, not just cooperate.
4. National business and industrial organizations should act as a lobby and show the need for career education in order to help establish higher priorities for career education at government and policy-making levels.
5. National business and industrial organizations can be leaders in identifying and disseminating model programs at the local level.
6. The business and industrial organizations on the national level should undertake an educational mission throughout the business community to increase understanding of career education, especially in the areas of differentiating between vocational or occupational education and career education, and in the constructive and compatible role of the liberal arts and humanities with career education.
7. The national organizations must actively promote expansion of State and local administrative councils that will represent a broad cross-section in the community.
8. National business and industrial organizations must use all means and opportunities available to see that their own network understands and supports career education. (Company materials, newsletters, etc. may be used for this.)

Mr. Heatherly stated that if these steps are followed, career education will emerge as the educational reform movement of the century.

Next, Mr. Eugene Sydnor, Jr., of the Education Committee of the U.S. Chamber of Commerce, Washington, D.C., called the implementation of career education programs a key project of the Chamber at this time.

"The Chamber is interested in education from several standpoints," he said. "One of these is the fact that the public school system in this country is liberally funded; funds have risen from over $8 billion in 1950 to $130 billion in the current year. Because tax dollars are allocated to education in such large amounts, the Chamber has sought to make sure that this money is spent effectively. In 1974, we concluded that career education represented a good way to receive maximum benefits for the money spent. The school systems which spent these large amounts of money did not always turn out people who were trained in basic skills. With only 3 percent of jobs in the total market in the unskilled category, employers often had to offer reeducational or catch-up programs for their employees."

In career education, the Chamber has made a commitment to the educational system.

"We believe," said Mr. Sydnor, "that the career education concept must have a communitywide effort in order to succeed, and we are working to promote this effort."

The Chamber members have developed materials for use by schools and the business community, in an attempt to "wire-in" the schools to the 21,000 different types of work available in the nationwide job market, and to educate businessmen in the concept of career education. A booklet called *Career Education—What It Is, Why We Need It* was developed for use by businessmen, with such groups as the National Education Association, National Congress of Parents and Teachers, National Association of Manufacturers, and many others assisting in the definition of career education. Similarly, *Careers, USA*, a program of films and related teaching materials, has been developed for use in schools.

Mr. Sydnor related that on the local level, career education is in operation in about one-half of the school districts to some extent. He cited several examples of cities where the Chamber of Commerce had helped in implementing programs. In Boston, the Chamber had taken the lead in introducing the Flexible Classroom. In this program, a business task force was established to survey the community, and a Flexible Classroom catalogue was then published. The high school students in the program then were able to leave their schools and go into the community on work internships which provide unpaid work experience. The Chamber serves as coordinator in this program.

Another program referred to by Mr. Sydnor is in Potomac (Montgomery County), Maryland. In the school involved, Winston Churchill High School, about 87 percent of the students go on to college. The Chamber finds professional and managerial-level sponsors in the community who will involve the students in the overall activities of their business lives.

Another program in which the Chamber has sponsored career education is in Toledo, Ohio. Here, a group of business and industrial employers hosts students from grades 7 and 8 in a series of tours. Each of the hosts conducts six tours of 1½ hours each, and a slide program has been developed to interest more people in the business community in the project. In another facet of the Toledo program, the superintendent of the school system has worked with large employers to set up a job placement program. In many cases, children have come from homes receiving welfare, and the job placement program has provided jobs for a very large percentage of these students.

Mr. Sydnor also mentioned that the Chamber of Commerce had played a large part in career education in other cities across the country, including Minneapolis, Minnesota and Mesa, Arizona.

Mr. Sydnor ended his presentation by stressing the importance of job placement in career education, pointing out that high school guidance had in the past been aimed at the average two out of 10 students who

go on to college. Now, however, high school guidance personnel work with all students, providing them with an understanding of available jobs and skills required.

Mr. Karl Wolfe, Director, Health Manpower Development, National Health Council (NHC), Inc., New York, New York, spoke next on the organization and function of the National Health Council. He described it as an umbrella organization of volunteers from members of groups concerned with public health, including the American Medical Association, American Health Association, American Red Cross, American Cancer Society, health insurance companies, government agencies, student organizations, and many others.

Mr. Wolfe stated that in terms of numbers of available careers, he believed that career education could place a strong emphasis on the health industry.

He stated that about 75 percent of the careers in the health field show an excellent outlook for the future at this time. He did point out some problem areas which he felt should be considered by those involved in career education programs which incorporate the health careers. One of these, he said, is that while there are no general shortages, it is sometimes not easy to find the needed person in the right place—for instance, it might be easy to find a surgeon, but difficult to find a general practitioner. He also mentioned that at both the technical and professional levels, there was underrepresentation of minorities and women, and he stressed the need for more members of these groups, both as policymakers and as people with specific expertise in given areas.

The National Health Council has a campaign which provides basic information on health careers, Mr. Wolfe said.

In conclusion, Mr. Wolfe stressed that he would like to see the National Health Council used as a resource by career education. He said that in terms of dollar survival, the council could obtain support from communities and organize representatives on the national, State, and local levels. He said that those seeking NHC help should familiarize themselves with the council's annual report and then approach the council for assistance in areas of NHC interests and resources.

The final presentation was made by Mr. R. Shane White, Human Resources Manager of the United States Chamber of Commerce, Washington, D.C. He stated that in working to develop policies for action in areas involving human needs, such as the areas of health, education, manpower, etc., the Chamber had set a high priority on career education. In a booklet produced by the Chamber, *Career Education and the Businessman*, the concept of career education has been defined for the business community, and a bibliography of career materials, *Career Information Guide for Students and Counselors*, has been developed for use by those groups.

Mr. White described in some depth the program *Careers, USA*, referred to earlier by Mr. Sydnor. He said that the program is an excellent resource for those involved in career education from grades K-12 and into college, and that it gives a good picture of the economic realities of the American free enterprise system and the role government can play. The program is structured on five levels. Level 1 shows career opportunities within the locality, and has broad industrial support, as does Level 2, which moves to the overall occupational clusters and their place in the community. Level 3 shows career opportunities in specific industries or fields of endeavor, such as forestry or construction. Level 4 shows what a student must know in order to get and keep a job and move upward in specific organizations. The last level, number 5, should have broad support from community groups, as it deals with career opportunities in the specific community.

Mr. White concluded by saying that local Chambers of Commerce have provided leadership in many communities to promote career education, and cited Albuquerque, New Mexico as a good example. In areas of Colorado, Louisiana, and Missouri, he continued, Chambers are working in career education and economic education. He told participants that if their communities were not involved in career education, their local Chambers of Commerce would assist in developing materials and resources and in bringing businessmen together to make career education known to them.

Session 701
Delivering Career Education Through National Business and Industry Organizations

Next Steps for Federal and State Career Education Legislation are Discussed

From left, Mr. Gilbert E. Bursley, State Senator, Ann Arbor, Michigan; Mr. Leo Lucero, State Representative and Chairman, House Education Committee, Department of Education, Denver, Colorado; and Mr. Warren Hill, Executive Director, Education Commission of the States, Denver, Colorado, in a session on Federal and State Legislation for Career Education.

Mr. Warren Hill, Executive Director, Education Commission of the States (ECS), Denver, Colorado, chaired a session on Federal and State Legislation for Career Education.

In his introductory remarks, Mr. Hill told participants that the ECS has been working extensively with career education studies and materials and it now has available (free of charge) summaries of 1975 legislation and programs in the 50 States affecting career education. He said his basic concern was that an appropriate relationship be established between Federal and State governments, since both have a legitimate interest in education and therefore must work together to avoid legislative duplication of effort.

Mr. Jack Jennings, Counsel for the Subcommittee for Elementary, Secondary, and Vocational Education, U.S. House of Representatives, Washington, D.C., said that there is a growing national feeling that "schools have to be righted."

He noted that since 1972, $200 million has been spent on research and development and education. Although he said that the Career Education Act of 1974 shows a noteworthy Federal expenditure of money, he said that as yet, we have had "neither a strong Federal money commitment nor legislation that was willing to back up a change."

Mr. Jennings posed the question: "What is the next step for career education at the Federal level?" He commented that to date only minor contributions have been made—e.g., Congressional appropriation of $8 million in planning grants for career education and $2 million for the cataloguing of career materials.

"In sum, Congress will most likely continue to commit monies but not enough to make sweeping changes," he said. "There is the feeling that career education is better off at the local level with seed money provided by legislation such as the Vocational Education Act and the Career Education Act."

Mr. Jennings said that under the new administration, the House Education Committee will begin hearings and try to push through the Perkins bill on career education in this session. Noting that the Perkins bill provides for Federal funding on a broad scale for career education, Mr. Jennings listed the following reasons for introducing it:

1. It hopes to move beyond the experimental stages, beyond simple planning and assistance to a broader implementation of career education.
2. The bill hopes to better distinguish between the characteristics of career education and vocational education through its implementation.
3. The bill is a public commitment for Federal involvement in career education, but a limited one in terms of time and money involved.

The bill provides for decreasing Federal funding over a 4-year period as follows: year 1—$100 million; year 2—$75 million; year 3—$50 million; year 4—$25 million.

After year 4, Federal funding will stop because if career education is ideologically consistent and becomes a part of the system, Federal funding will be unnecessary.

Mr. Jennings noted that the Federal government cannot be thought of as an endless well and reminded participants that deficit spending is politically unpopular.

Next, Senator Gil Bursley, State of Michigan, Ann Arbor, Michigan, described the Michigan career education experience, which began in 1968 with a study of the Michigan K-12 system. He said that the study's concern was with the relevance of the educational system to the world of work.

Mr. Bursley related that in 1972 a bill was introduced to mandate career education through surveys of career and vocational education and planning.

In 1974 the Career Education Planning Act (Public Act 97) was passed by the Michigan legislature through the support and interest of bipartisan groups. The bill provided for:

1. The creation of a 20-member Statewide advisory

Mr. Jack Jennings, Counsel, Subcommittee on Education, U.S. House of Representatives, Washington, D.C., in a session on Federal and State Legislation for Career Education.

council on career education.

2. The creation of 45 career education planning districts (local).
3. A plan to be submitted at the end of the following year for State coordination and legislative suggestions.

Mr. Bursley said that although the Michigan plan encountered timing problems with respect to budgets in transferring State to local plans and a fiscal crunch in 1975, the plan has generated interest Statewide. In 1975, 520 out of 530 school districts submitted plans for a career education program.

"In most States, the educational dollar is increasingly difficult to come by because of decreasing school enrollment and the competition between special interests," he said. "Yet mandating programs for local districts is also difficult unless you include funding because of in-service training and planning needs."

Mr. Bursley expressed the hope that individual States will have follow-up conferences to ensure that the public understands that career education embraces all educational interests and is not competing with adult or early childhood education.

"The key is in getting the legislature to support career education by demonstrating involvement and interest yourselves," he concluded.

Next, Mr. Leo Lucero, Colorado State Representative, and Chairman, House Education Committee, Department of Education, Denver, Colorado, provided participants with a brief history of educational reform in Colorado. He said that six years ago only a small minority was dissatisfied with the educational system; therefore, nothing was done. However, he added that approximately two years ago people started talking about a vehicle for positive change in the school system itself. He went on to say that few children have a sense of direction and that we owe them a philosophy showing them that they have alternative directions in which to go.

"In order to accomplish this, we must cut into the system and offer changes, little by little," he said.

Mr. Lucero noted that one of the big obstacles in carrying out this philosophy has been breaking down attitudes and misconceptions about career education and vocational education.

"The 'how' depends on the type of individual in the program and different selling techniques," he said.

Mr. Lucero noted that the Colorado bill employed a Statewide effort that included facilitators and community interests. The bill emphasized matching funds and cooperative service ventures, he said.

"For a bill to have an effect, you must keep administrative costs to a minimum and attempt to channel funds to communities which are willing to pay the price of that dollar," he said. "But, most of all, begin working with your community, because the educational dollar is hard to come by and it's going to be even harder to convince legislators of the importance of career education. It is very important to have the input of all educational-associated members in order to put up a united front and avoid conflict among competing interests."

Mr. Lucero cited the State career education coordination as being the turning point in Colorado's success in moving beyond merely an advisory group. He feels that its success is attributable to the ability to cover the entire State and to tap resources.

Session 702
Federal and State Legislation
for Career Education

Gallagher Urges Participants to 'Nurture Career Development Like a Seed'

"Let us sow a seed, nurture it, and sit back and watch it grow."

These are the words of Mr. Alfred K. Gallagher, Director of Pupil Services in Delaware County, Pennsylvania, in reference to the inception of his career development program, which focuses on curriculum renewal.

Mr. Gallagher's territory encompasses 15 school districts and six secondary nonpublic schools.

"To begin with, all of the districts need the team concept," Mr. Gallagher explained. "Curriculum specialists, teachers, and guidance counselors make career development happen."

"Career education is a comprehensive program focused on careers, beginning in grade one through the adult years," he continued.

He noted that in elementary school the prime career development consideration is the formation of self-concept and developing a vocabulary of self and environmental alternatives. Junior high involves translation of self-concept into vocational terms, dealing with exploratory needs and their purpose and intent, he added. In senior high school, he said that the prime career development consideration is formulating plans to execute implementation of self-concept and generalized preference.

"You have only one career, but many occupations and several vocations," Mr. Gallagher said.

In Mr. Gallagher's view, some elements and desired outcomes of career development should be analyzed. Career awareness should yield career identity; self-awareness, self-identity; appreciations and attitudes, social fulfillment; decision-making skills, career decisions; economic awareness, economic understanding; beginning competencies, employment skills; employability skills, career placement; and educational awareness, educational identity.

"Effective career education equips young people to live their lives as fulfilled human beings," he stated. "Career education helps students develop attitudes about the many significances of work."

Mr. Gallagher said it is of vital importance for educators to ensure that students leaving high school are placed in adequate jobs.

"It is the educators' responsibility to help with students' self-development, to determine what students are best at, and to define what students really like to do," he said.

Session 703
Career Development: Focus on Curriculum Renewal

Volunteer Organizations Meet the Career Education Challenge

"Many youth groups throughout the country have determined the need exists to assist young people in career planning and work entry experiences," stated Ms. Nancy Garfield, Career Education Project Director, Program Department, Girl Scouts of the USA.

There are many projects being carried on by a number of different volunteer groups in the United States to help the youth of today achieve a better understanding of themselves and their potential careers.

"Youth unemployment is at a critical level. Young people need help to direct their futures. They need help in identifying their own needs and skills. They also need counseling to help them understand what training is required for different jobs, to obtain the appropriate skills and education for future jobs, and to plan future careers," said Ms. Garfield.

Ms. Garfield suggested the need for local agencies to come together to offer as many career services to young people as possible.

She noted the needs of the changing future job market and how it affects youth.

"More than ever before, youth must be prepared to meet the future with a flexibility and adaptability to change that is unprecedented in human history," she asserted.

She suggested that many of the problems with today's youth may be due to the poor quality of jobs (if any) that are available to them and the resulting discouragement and damage to young people's self-image.

Women's Liberation has also had its impact on today's young women, who now view their career choices as a lifelong process.

"This new shift in attitude requires a new approach in educating young women for the future work force," Ms. Garfield stated.

She noted that it also must be recognized that women are still primarily employed in only five job categories, and minority and low-income groups are at even more of a loss. Suggesting the use of role models to introduce more career choices, she said she feels that voluntary youth agencies of today are dealing with these problems by establishing special programs for special groups.

The Girl Scouts of the USA's career education project, "From Dreams To Reality," is a working example of a national program tailored to the needs of a special group—adolescent girls. It incorporates the use of 160 different female role models to encourage girls to expand their career choices. There is also a job component for real work experience in business and industry.

"This project can help the girls develop a self-awareness that will carry them through decision-making times throughout their entire lives," Ms. Garfield said.

In addition to the Girl Scouts,

many other voluntary organizations are involved in providing a link between career education and the needs of today's youth. The Boys' Clubs of America, Campfire Girls, the YMCA, and the YWCA are a few examples.

Session 704
The Role of Voluntary Organizations in the Placement Process

Suggestions Offered to Aid in Success of Career Education

Career education is being fostered by Comprehensive Employment and Training Act funds in various parts of the country. Work experience programs for the disadvantaged, apprenticeship programs, career awareness programs, and career information resource centers are some of the services being provided.

Mr. Joseph Davis, Planning Analyst, State Manpower Council, Madison, Wisconsin, offered some words of caution to career educators. He suggested that the focus of career education be geared to the individual, that career educators not try to do too much too soon, and that the basics of education not be deemphasized.

Mr. Davis warned of the danger of tracking individuals into occupational slots where they would be trapped. He expressed the fear that the educationally disadvantaged might be placed in undesirable or low-paying jobs, thereby preventing them from improving their economic status.

Mr. Davis recommended a program of placement coupled with occupational training involving actual work experience. He said that barriers between the world of work and education must be broken down if the career education concept is to be accepted.

In Mr. Davis' opinion, career education advocates should seek linkages with manpower. He expressed the hope that one result of the Commissioner's National Conference on Career Education would be the establishment of such a communications system.

Session 705
Career Education and the Comprehensive Employment and Training Act

Career Education Brings Reality to Social Studies Classes

Ms. Kathryn M. Backus, a social studies teacher from Hamden, Connecticut, stated, "The goal of career education is to equip citizens with sufficient skills so they will successfully adapt in our ever-changing society."

She added that this is also an important goal in the "new" social studies, and a different phase of career education called "citizenship education."

Emphasizing the importance of reality-based education, Ms. Backus said, "This is where the social studies enter, with emphasis on the social, for socialization. We are helping to make social beings out of the students in our classrooms."

Some of the major concepts of social studies, according to Ms. Backus, are: developing awareness in students of values, helping them understand the world around them, and helping them learn to make decisions.

"These goals are a close parallel to the three major components of career education: knowledge of self, knowledge of the world of work, and the decision-making process," she explained.

"Career education with social studies brings several things to the whole major area. It brings in the reality, because in social studies, we're not just understanding the world of work, but we're gaining some useful and reasonable information. It brings motivation to the social studies due to personalization of the information that is coming across to the students," she said.

One idea Ms. Backus rejected is the subject of a separate curriculum for career education. Instead of setting aside a few sessions a week to "do career education," she said she believes it should be infused with the regular school programs.

"The early years of learning are so crucial, we have to be sensitive in working with students concerning their development of values and attitudes toward the world around them," she commented.

Ms. Backus stated that sometimes questions are useful in measuring student ideas on the world of work and career goals. She gave the example of a high school teacher who, for the past few years, has asked her classes three questions: (1) If you could be anything in the whole world, especially in terms of a career, what would it be? (2) What is the highest career goal you could possibly attain? and (3) What do you realistically think you will end up being?

The answers have ranged from amusing and outlandish to disheartening and discouraging. Ms. Backus pointed out that children appear to have information about the world of work, but haven't personalized it yet.

"This may account for the low expectations recorded in their answers," she said.

By the adaptation of career education to the social studies, Ms. Backus said she feels that even difficult areas of the subject can be made relative to the students' interests. She told participants that three different levels (facts, concepts, and values) comprise the basic structure in social studies, and said she emphasizes the values level for the personalization of the facts and concepts.

"The values can be very easily incorporated into what's already happening in your curriculum, to make it more meaningful to the students," she concluded.

Session 707
The Elementary Social Studies Teacher in Career Education

Gess Stresses Need for Innovative Approach to Teaching Methods for Career Education

During a session on The Elementary Reading Teacher in Career Education, Dr. Diane Gess, Elementary Administrator, Hillcrest School, Spring Valley, New York, discussed various teaching methods that are geared to appeal to a student and will create an atmosphere conducive to career education. Dr. Gess noted that the use of antiquated items that are unfamiliar to students is very effective in stimulating curiosity. After the object and its related uses are identified, the careers connected with the object can be defined, she said.

Dr. Gess emphasized the necessity of using both appealing material and an innovative approach.

"An example of this could be based on children's love of monsters," she said. "Pollution could be portrayed by a monster on a bulletin board, and careers connected with pollution could then be explored."

Showing participants that innovative approaches can be used in teaching academic subjects, Dr. Gess said that she used a milk carton to construct a simple computer that is programmed to add "ing" endings to words. This spelling lesson can then serve a double purpose by providing the opportunity for a discussion or project dealing with careers in the field of computer programming, she said.

Among the ideas she presented were: placing a mannequin in the classroom and changing its dress weekly to portray different careers; filling individual paper bags with various objects that suggest different careers for the student to define; using chicken or turkey bones that have been boiled and bleached to stimulate interest in such fields as ornithology and anthropology; and researching fashion history and dressing to stimulate interest in the dressmaking, tailoring, and designing fields.

Dr. Gess noted that there are also many methods to encompass a number of different careers in a single project. She used the example of a publications project, which might include the writing, printing, binding, copyrighting, and selling of the book.

Session 708
The Elementary Reading Teacher in Career Education

Orange Coast Community College Career Development Center Gets Heavy Traffic

Orange Coast Community College, in Costa Mesa, California is a big school, with an enrollment of 29,000 students. Increasing numbers of these students have patronized the campus career development center since its opening in 1974. At this time the weekly traffic estimate at the center is 2,500. Students served by the center in 1975-76 numbered 19,442, compared with 6,239 in 1973-74.

Dr. Robert Moore, the center's President, said that the center evolved from a student-sponsored volunteer program, itself a spinoff of the student activism of the 1960's. Added to this later were a work experience program, a counseling program (with community input), and a small student employment office. The latter grew when Federal funds became available.

The center, still evolving, is now housed in a six-trailer, 3,000-square-foot facility near the campus library. In the words of Mr. James Garmon, Director of the center, the layout was planned "to make maximum use of space and facilitate heavy traffic. All services are housed in an open bay to promote a 'supermarket' style." Student users, he added, comment on the center's "good vibrations."

In a slide presentation on the center, students were seen using various facilities: the career resource library; vocational counseling; the volunteer bureau (where college credit can be earned for work in one's major field); the computerized guidance information system; and, most heavily used, the job placement service.

Discussing the job placement service, Mr. Garmon stated that as students were attracted to it, they learned about other services offered by the center.

"It is easier to come in looking for a job," he pointed out, "than to come in saying, in effect, 'I think I need help'."

The cooperative education program at the center offers students a chance to enhance their career education through work in real job situations. About 100 faculty members act as advisors in the cooperative education program. They visit students on the job, talk to their employers, and evaluate performance. Dr. Moore noted that 1,300 students were enrolled in this program in 1976.

The computerized guidance information system utilizes the California manpower information system, which looks into the 1980's to see what kind of jobs will be available then. Resulting information is used as a counseling and guidance tool.

Dr. Moore and Mr. Garmon said they look forward to further mushrooming growth of the center. Important to this, on large campuses, they stressed, is adequate publicity.

"They've got to know that you're there," Dr. Moore said.

Also vital is support from the college administration's top level, they said.

As expected growth takes place at Orange Coast Community College's career development center, its staff hope to be ready for it. Their plans include not only expansion of numbers of students served, but additional services.

Session 713
Career Education Practices: Community College

Ms. Linda Shearer, Teacher, Learning Resources Center, Project Discovery, Red Oak, Iowa, discusses career education materials with students Delia Sanchez, Troy Wootton, Jay Sorensen, and Katrina Holt.

USC Emphasizes Career Education at University Level

"More career education should be done after K-12 than before," exclaimed Dr. David L. Mahrer, Assistant Director of Career Planning and Placement at the University of South Carolina (USC).

Dr. Mahrer proceeded to explain some of the career concepts and discussed career education programs offered at the university.

The first program is based on the John Holland Theory of Personality which involves translating test results in a "personality room."

Dr. Mahrer said that each student can voluntarily take personality and career placement tests and has an option to interview with two full-time advisors. After the student has taken the tests, he walks into a 6-sided personality room which has an illustration of a different personality type and its particular characteristics on each wall. These include the realistic personality (practical, takes action), investigative (intellectual and alert), artistic, social, enterprising, and conventional.

"Beside each wall is a file of occupations suited for that personality type," said Dr. Mahrer.

He noted that career information areas are also depicted in each college in the form of career trees. The trunk of the tree represents the college major itself and the branches are the different job options available in that area.

"We sponsor a program for the undecided major," Dr. Mahrer continued, "in which students are offered the option of going into career decision-making groups. Academic and career advisors run the program, which is sponsored by the Center for Academic Advisement."

Another program offered involves three 2-hour or two 3-hour sessions where students who have decided on a major are given career information relating to their majors and taught how to make effective career decisions.

He explained that another program available to students involves a series of games and questions to arouse interest of the students in career education and motivate them to make career decisions.

The fourth program outlined by Dr. Mahrer is a careers in education course offered for three hours of credit.

The course, known as Reactions to Experiences with Affective Potential (REAP), has three levels: personal awareness, involvement, and commitment. This course teaches the student who wants a teaching job what is necessary for the survival of a teacher in the classroom. This is done by observing student reactions to experiences in the community and relating these experiences to classroom study.

Dr. Mahrer said that this concept is based on Lawler's work on organizational development principles borrowed from business.

"Another aim inherent in the course," Dr. Mahrer said, "is to transfer the responsibility for the activity in the course from the teacher to the student."

Session 714
Career Education Practices: College/University Setting

Job Placement Programs Aid Transition From School to Work

Many students find it difficult to make the transition from school to work because of inexperience and the lack of adequate preparation, said Mr. Raymond A. Wasil, Director of Guidance and Testing, Ohio Department of Education. Mr. Wasil discussed the central theme of Ohio's career guidance continuum, to help students prepare for their relationship with the world of work.

According to Mr. Wasil, the success of a job placement program involves the coordination and support of business and industry.

He said that there are three main ingredients essential to the formation of a placement service: data on students, preparation, and placement.

Student data includes information on the students' interests, abilities, and skills in addition to specific information on age, address, etc. Mr. Wasil mentioned that in his program all essential information cards are computer-based for easy filing.

Mr. Wasil said that an employer card is filed so that future plans of companies for hiring at specific times for specific jobs can be known.

He also noted that there is a dropout data file to keep in contact with those students who never completed high school. There are funds available for disadvantaged students, he added.

"Pre-employment preparation can add confidence to successfully competing in the world of work. Students learn resume writing, interviewing techniques, and how to fill out applications," he said.

The service also deals with employer as well as student expectations.

"We emphasize that no job is degrading and that pride should be taken in one's work," Mr. Wasil said.

Through comprehensive placement services, he said he feels that students can apply for jobs more confidently and accept the responsibilities of the world of work.

Session 717
Job Placement Practices in Career Education

Washington Advisory Committee Helps Superintendent of Public Instruction Implement Career Education

The most important duty of the Washington State Career Education Advisory Committee is to assist the Superintendent of Public Instruction in the development, implementation, and evaluation of career education programs, according to Mr. Richard Lutz, Supervisor, Career Education, Division of Vocational-Technical and Adult Education Services, Office of Superintendent of Public Instruction, Seattle, Washington. He said that it also helps establish and use communications channels between the superintendent and organizations concerned with career education.

"The State Advisory Committee (SAC) is made up of lay citizens, not professional educators," Mr. Lutz said. "It consists of one member from each of 13 groups that we feel represent a broad cross-section of Washington."

The Washington Council on Economic Education, Washington Medical Association, Washington State Bar Association, Northwest Construction Council, Association of Washington Business, Washington State Grange, State Labor Council, Oceanographic Commission of Washington, and Joint Council of Teamsters have representatives in SAC.

Mr. Lutz noted that a private citizen, a retired citizen, a high school or college student, and a representative of public utilities are also members of SAC.

According to Mr. Lutz, these members, appointed by the superintendent, represent the public, business, industry, labor, and professional groups as well as various geographical areas in the State.

"These differing representatives together form a commonality in assisting the superintendent in career education matters," Mr. Lutz said.

SAC makes recommendations to him concerning the formation of career education policies. It assists him in preparation of career education operational plans, as may be required by State or Federal legislation. It assists him in the evaluation of operational plans used to implement career education programs supported by local, State, or Federal funds. And SAC helps the superintendent spread information related to career education programs.

"We try to meet in different locations around the State to encourage interchange among State and local career education people," Mr. Lutz said. "This also enables SAC to see career education in action at the local schools. SAC has now seen a lot of the State plan in action and we think we've been quite successful," he said.

Session 719
Community Career Education Action Committees

Project CHOICE Makes Students Aware of World of Work

"To graduate every one of our students with a marketable skill is the goal of the San Diego Unified School District," according to Dr. Philip Halfaker, Member, Board of Education, San Diego City Schools, and Professor at San Diego State University, San Diego, California.

He plans to achieve that goal through a career education program called Children Have Options in Career Education (CHOICE). The program brings speakers from 40 different career clusters into the classroom, with help from a certified teacher, to make K-12 students aware of the world of work.

Dr. Halfaker stated that the program is designed to provide students with opportunities for identifying career options, to supply career decision-making information, and to promote an understanding of the personal and social significance of work. Materials for the program use a career cluster approach and provide for student choice in career fields, he added.

"Our school board is behind our career education program," Dr. Halfaker said. "The biggest problem is changing the attitudes of administrators and faculty."

However, he noted that in San Diego's large urban school district there is a distinct communications problem, making it difficult to infuse the program into standard curriculum.

"One thing that has helped us quite a bit is the organization of advisory units," Dr. Ronald Detrick, Director of Career Education, San Diego City Schools, noted. "We have 40 advisory units made up of local business, industry, labor, military, and government leaders."

Dr. Chris Chialtas, Career Education Program Coordinator, San Diego City Schools, said, "Most of the money we have received for career education has come from the school district. That shows me that the program has its commitment."

Dr. Halfaker contended that unless the career education programs across the country have school board support, the programs will never last.

Dr. Halfaker also said he thinks career education will help the basic skills scores in the San Diego district. However, he added that career education needs to develop quickly because of the declining basic skills scores.

"The public is not aware of the worth of the program yet. They may decide that career education is the cause of the dropping scores," he said.

Dr. Chialtas agreed and gave an example of how career education can motivate students to improve their basic skills.

"Punctuating a sentence properly may mean nothing to some people; but if a person wants to be an author, it is a different matter. It then becomes a part of his trade," Dr. Chialtas said.

Session 720
The School Board Member in Career Education

Florida Center Disseminates Career Education Information Throughout State

Mr. Robert Lathrop, Director of Career Education for Florida State University, Tallahassee, Florida, discussed the center's work in disseminating career education information throughout the State.

"Florida is one of the most diverse States in the nation. We have counties with one school, such as Liberty, and counties with several hundred schools, such as Dade. But for each there is one vocational center established by the State, and there our efforts must be directed," he said.

Following the center's establishment in 1973, with Federal money channeled through the State to the university, Mr. Lathrop began assembling a staff which now numbers 100 specialists. His first task was to get information on career education out into the field.

He noted that the staff is organized in five divisions. One, instructional design, works on vocational education courses. A second, visual communications, provides slides and microfiche at cost to local districts. A third, publications, puts out a monthly magazine and directories on what the center offers and who is locally responsible for career education in each of the State's 66 counties. The fourth division, information services, answers requests for information, and the fifth, diffusion, works on reaching out into localities with materials from the center.

"I found when I arrived that there was little relevant material on career education, so our center set about to create its own," he said.

Working on a task force concept similar to NASA's, Mr. Lathrop appointed people from each division to work on problems together and design programs which would be easy to use and of the most value.

"Many of the center's publications come out on slick paper and actually look better than professional publications," he said. "This is partially due to the team approach used at the center; besides, we found that it would be more expensive to use mimeo or stencil for the large quantities we needed."

According to Mr. Lathrop, the center's activities have had a distinct impact on career education in Florida. The center produces a comprehensive catalogue as well as its own instructional materials, and performs constant evaluations (approximately 200 per month) on State and local programs.

"The only problem," said Mr. Lathrop, "is that the center is now approaching optimum size while both the State and localities are de-

manding more services. We're either going to have to increase our staff, which would hurt our team concept, or learn when and how to say no."

In attaining these results, he emphasized the importance of support from the State Board of Education. The pressures have been tremendous, he noted, for the center's emphasis to be on vocational training, rather than career education.

Session 722
Planning and Managing a Career Education Resource Center

Mr. Charles Milhoan, Job Placement Coordinator, Washington County Vocational School, Marietta, Ohio, in a session on Career Education Practices: Middle/ Junior High School.

Big Business Decries Curriculum Inadequacies

Representatives of big business are complaining that today's students are not receiving adequate training in the definitions and values needed to fill executive positions.

In a session on Large Business and Industry in Career Education, Mr. Earl Grabhorn, Educational Director for Texas Midcontinent Oil and Gas Association, Dallas, Texas, cited studies revealing widespread ignorance about business profit.

"One poll shows that most Americans think that business corporations make so much money. . .so much profit. . .that they can afford to raise wages without raising prices. . .They believe that the average manufacturer makes 28 percent after-tax profit on sales. This misinformed 'public' to which I am referring cuts across virtually all social, economic, and demographic lines. . . The actual figure for the year the poll was taken (1973) . . .was 4.3 percent," he said.

Mr. Grabhorn asserted, "I submit that the private enterprise system, if understood by teachers and students on all levels, would provide the motivation and improve both attitudes toward and pride in one's work."

According to Mr. Grabhorn, Texas Midcontinent Oil and Gas Association currently provides booklets, charts, maps, and lecturers to teach students from kindergarten through college about oil, including facts on production, economics, research, geology, energy policy, and environmental concerns. The association also sponsors an annual Petroleum Institute for Educators to show 80 teachers all facets of the industry.

Mr. William J. Cook, Vice President of Hudson-Thompson, Inc., of Montgomery, Alabama, claimed that educational systems lack relevance to the world of business.

He stated, "One cause of student unrest lies in the fact that the students are caught between the classroom and the office, between the laboratory and the factory."

He continued, "Unfortunately, we expect schools to fulfill functions peripheral to their basic functions. They have been doing the work of the churches and the family. Until schools are allowed to concentrate on education, schools will produce still more frustrated seniors."

Mr. Cook prescribed an educational course of action first described by John Milton in 1644 and said, "Education should have scope. It should encompass the total man and total woman. We don't need education for education's sake, but education for life."

He also demanded that schools teach an ethical code.

"It is sadly ironic that institutions for pursuing truth are ignoring the values behind that truth," he said.

Mr. Cook's concept of education also includes recognition of the importance of skills and pride in one's work for every individual. Career education should recognize individual contributions, Mr. Cook averred.

"We now have schools where no one fails, where we protect the losers and hide the winners in an appeal to the egalitarianism of mediocrity. . .A noble failure is better than a mediocre success. *That's* what I ask career education to teach," he said.

Mr. Robert A. Trebesch, Regional Personnel Director of Montgomery Ward and Company, Kansas City, Missouri, also complained about inadequacies in post-secondary education.

He said, "At exit interviews, the number one thing we're told is that the academic world didn't make them (the people quitting) ready for the real world and business. They couldn't stand up under real world pressure."

He claimed that the universities are, in many cases, not interested in preparing young people for the outside world and give no aid toward the development of personal motivation, achievement goals, or ethics.

In many cases, he said that college graduates are not as well prepared for business as high school graduates.

He stated, "In management training, distributive education students have a good success rate, better than the rate for university students."

Mr. Trebesch related that to prepare young people for big business, most trainees at Montgomery Ward and Company are sent through a 2½-year training

course before their first management job. The trainees (70 percent culled from universities and 30 percent from internal positions) are given departments in individual stores to manage, as well as taking courses in Transactional Analysis, problem-solving, and management skills.

He added that Montgomery Ward and Company also conducts a cadet program for university students, in which the students work for six months at trainee rates and attend classes the rest of the year.

Session 724
Large Business and Industry in Career Education

Akron Regional Development Board Makes Commitment to Career Education

"The Akron Regional Development Board (ARDB) is a Chamber of Commerce with a strong commitment to education in the Akron, Ohio area. In addition to being the eyes and ears of the small businessman, the board maintains several programs in career education," said Mr. Paul C. Livick, Director of Special Events for ARDB.

Mr. Livick told participants that the board has been involved in education since 1947. One of its early programs was an "action course in practical politics" to help students understand voter responsibilities.

Later, the board involved itself in career education, bringing business and industry into the whole career education program in Akron, he said.

According to Mr. Livick, the career education program, funded in part by the U.S. Office of Education, includes "The Talking Bike," emphasizing bicycle safety to fourth and fifth graders, and the children's hospital program, aimed at making students more aware of the workings of a hospital.

Mr. Livick stated that the board is also involved in LEAP (Labor Educational Advancement Program), which demonstrates various occupational fields in an attempt to develop career awareness in students.

He commented that the board is concerned that many college graduates leave the Akron area and remarked that part of the career education objective is to show graduates the job possibilities in Akron.

Mr. Jerry M. Ryan, Business Coordinator for Career Education in the Akron schools, said, "We're focusing on involvement in the community."

Dr. William Nemac, Career Education Workshop Coordinator from Akron University, noted the need for more involvement from different areas in career education.

For example, he said there is still a need for teachers to have a greater awareness of the world of work, and for high school students to have more occupational information.

To alleviate this situation, he noted that Akron has instituted career education workshops that help teachers get more hands-on experience in career education.

Session 725
The Chamber of Commerce in Career Education

Calhoun Urges Use of Simple Language in Selling Career Education to the Community

In a session on Getting Us Together: Business and Education, Ms. Victoria Calhoun, Public Relations Supervisor for Illinois Bell Telephone, Chicago, Illinois, stressed the necessity of speaking in terms your listener can understand when trying to sell career education to the community.

"Every professional or social group in our society has its own language these days," she said. "In my business, I could tell you that, 'Calls from pc's are free as long as you are calling on a three b pc with a ks900 list return chute served by an odd-numbered marker in a number one cross-bar office.' You'd obviously have no idea of what I was talking about."

In working with people who represent telephone company business to the outside world, Ms. Calhoun said she emphasizes that they need to take the "telephonese" out of their language and speak in terms that normal people can understand.

Emphasizing the importance of community involvement, she said, "Without. . .total community endorsement and participation, career education is destined to die a painful death, probably a very quick one."

Ms. Calhoun added that in many communities, however, many misconceptions exist about career education.

"One way to help prevent misconceptions," she pointed out, "is to educate the community about career education."

Recognizing that it is impossible to make contacts with every individual in the community, she said that information about career education must be directed at sectors of the community.

She used the business sector as an example.

"Where and how you start is going to depend on the knowledge you have about the organization. Many associations have an education committee, employment committee, or community services committee," she noted.

"If the association doesn't have a special group (committee), then starting at the top may be the most efficient way to crack the hierarchy," she added.

Ms. Calhoun advised that it is important before making a contact in the business sector to consider the point of view of the contactee. She noted that this is done by emphasizing the contactee's self-interest at the beginning. For example,

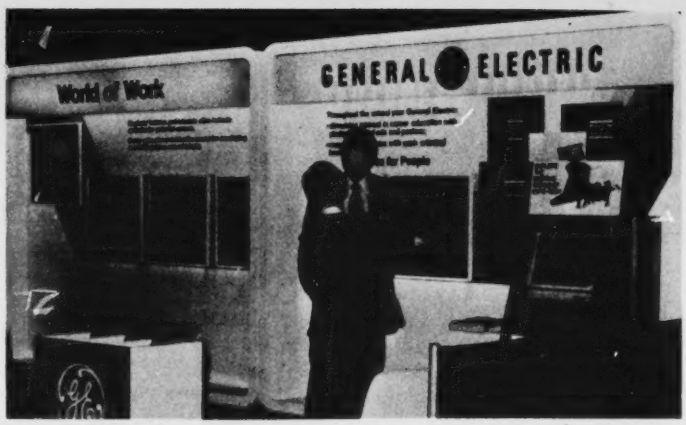
she said that when talking to a business president about career education, one should make sure that the president understands that career education might mean the difference between a motivated or unmotivated work force.

To disseminate information to the members of the business sector, Ms. Calhoun recommended that existing material, rather than new material, should be used. She also suggested that other sectors be contacted about career education.

"We need to analyze each sector of the community, by asking the same questions, and using the same informational media, to identify ways of reaching them," she said.

"What we hope to find is an information system that is common to the groups most important to us in reaching our goal," she concluded.

Session 727
Getting Us Together: Business and Education



Mr. Jim Clark, Manager, Corporate Educational Communications Public Relations Programs, General Electric Company, Fairfield, Connecticut, discusses GE's career education efforts with a participant.

UAW Focuses on Labor Studies Component of Career Education

A clarification of the role of organized labor vis-a-vis career education was the purpose of a UAW (United Auto Workers) panel at the Commissioner's National Conference on Career Education.

The panel was chaired by Mr. Al Lorente of the UAW, currently Vice Chairperson of the Michigan Career Education Advisory Council. Speakers included Mr. Garland Ham, UAW's International Representative to the Community Action Program; Mr. Harold O'Reilly, Education Director of UAW's Region 5; and Dr. Mark Schulman, an Assistant Professor from Antioch College.

Mr. Lorente opened the session with a precis of the history, goals, and expectations of Michigan's Career Education Advisory Council, and showed how the UAW and organized labor in general supports the career education movement.

He was followed by Mr. O'Reilly, who described in detail the UAW conception of a new educational program—a course of study oriented toward community colleges, leading to an Associate degree in labor studies.

Mr. Ham then spoke of the UAW's total commitment to the career education concept. The session was finished by Dr. Schulman's presentation of selected portions of his paper, "Issues and Strategies for Enhancing Participation of Labor in Career Education."

1. The Michigan Career Education Advisory Council

In 1974, a career education law was passed in Michigan, authorizing the formation of an advisory council. This council was to be composed of representatives from the educational community, organized labor, students, parents, business and industry, and community groups, evenly split between the education representatives and all the rest. The council was to be fully integrated, by race, sex, and age, to reflect a true cross-section of society.

In the course of its deliberations, the council defined its concept of career education. Following production of a concept paper, a handbook for implementation was prepared, including cost analyses and budgetary requirements for in-service training. The council headed a coalition to seek funding for the career education concept in Michigan. The Chamber of Commerce, the AFL-CIO, and the UAW led in this attempt. This coalition was unsuccessful, at first, in obtaining significant funding from the Michigan General Assembly. Only token funding for some in-service training programs was actually appropriated. One reason for this lack of support was the silence of teacher unions, whose members apparently were unsure of the role they should play in implementing the Michigan career education

concept.

Since that time, the advisory council has begun to meet with teacher associations, the PTA, and other groups in order to promote career education. Council members are now hopeful that with a broad base of support throughout the States, a more solid front will be presented to the legislature to seek funding for the career education concept. In spite of the initial failure to secure adequate funds, the advisory council impressed the State government to the extent of obtaining official State policy support for career education.

2. The UAW and Career Education

"The UAW endorses the career education philosophy and is willing to work with educators and others toward successful implementation of the career education concept," Mr. Lorente said.

(Mr. Ham also emphasized this point by noting that the UAW is totally committed to career education programs by international executive action.)

Mr. Lorente continued, "The UAW does not have a lock on the ideas generated so far. Many valuable ideas have been developed at the local level. . . .A union exists for the benefit of its members, and career education helps to increase job satisfaction."

Mr. Lorente then pointed out that although the UAW has been involved in school programs to a limited extent, he hopes that with increased understanding, there will be more involvement in the future.

"The UAW sees the advisory council as a cooperative effort to involve many segments of the community," he said. "We see a good future for career education through cooperation between the community and the educational structure."

Mr. Lorente mentioned that organized labor can and will provide representatives to help the promulgation of the career education concept.

"We can help to harness the wealth of learning potential, by setting performance objectives in all areas," he stated. "We can provide input to develop broad-based support and endorsement of career education . . . .We will use the local unions as resources."

Mr. Lorente then described past efforts of the UAW regarding career education. The UAW has provided speakers, through its Speakers' Bureau, to school districts and has placed 7,000 books on school library shelves. Suggestions have been made for remedial training, based on the results of simulated entry-level student testing (a pilot project). The union has provided curriculum materials in support of these suggestions. He stressed the fact that the UAW has the largest education staff in the organized labor movement.

However, Mr. Lorente was quick to point out that there were limits to UAW involvement in career education.

"A strong union remains viable only as long as collective bargaining is effective. To ensure this taxes all of our resources. Our workdays are frequently 18 hours long, especially before and during contract negotiations. But at other times, the unions can support career education more fully," he said.

In closing, Mr. Lorente spoke of the hope for more funding for public education—"not just peanuts, but real dollars." He emphasized that the UAW is action-oriented and stressed the importance of maintaining a dialogue with the educational community, so that labor will be extensively involved in the career education process.

3. The UAW and Labor Studies

Mr. O'Reilly spoke at length on the need for and benefits of a labor studies program in community colleges. His presentation focused on a plan for implementation of a course of study leading to an Associate degree in labor studies, with credit transfer rights to a 4-year institution. Mr. Ham supported Mr. O'Reilly's exposition by pointing out that the UAW has cooperated with 52 community colleges which now have Associate degree programs in the labor studies area.

a. The Labor Studies Concept

In 1966, a survey of 110 students in the labor movement (primarily UAW member students) was conducted with the purpose of determining the interest, if any, in continuing education in a college-level program. The survey found that 92 percent were interested in enrolling in a labor studies program, and that 75 percent would want to achieve an Associate degree.

"The need is demonstrably great," said Mr. O'Reilly. "Contract language is complex. In contract negotiations, wages are no longer the only important consideration. Insurance, working conditions, health and safety factors, personnel policies, and supplemental employee benefits have become increasingly important parts of the collective bargaining process."

Noting that these factors require additional negotiating skills, as well as increased familiarity with Federal and State laws, he stressed the need for organized labor to require new information and new skills, for new leadership.

Mr. O'Reilly pointed out that the labor movement has changed over the years.

"The old concept of 'bread and butter' is not adequate in more affluent times," he asserted. "We have come to the point where we need to cooperate actively with the schools. We see the union as assuming a role of social responsibility. Society insists that organized labor do this."

Mentioning that "education programs have been developed and financed through union resources," he remarked that the UAW hopes to extend these programs to all areas of union membership and seeks the understanding and help of the educational community to do this.

Mr. O'Reilly credited the educational community's interest in working with organized labor to develop programs providing a broader understanding of personal roles in the world of work. He mentioned other programs which help people acquire new technical skills needed to stimulate a rise in personal well-being, especially in urban areas; programs to improve good

citizenship and effective leadership in local unions; programs to improve proficiency in social science skills; and programs to enable workers to obtain college degrees.

b. The Labor Studies Program

Next, Mr. O'Reilly spoke of the UAW's support of an Associate degree program in labor studies. He told participants that the degree program would be a 2-year course of study, combining facets of labor relations and the liberal arts (economics, sociology, political science, communications, psychology, the humanities, and philosophy). The program would receive full credit at a community college level, and have transfer rights toward a Bachelor of Arts degree at a 4-year school. The admission requirements would be similar to those for other students (a GED or equivalent). Prospective degree candidates would qualify through entrance examination or by union recommendation. The passing grade would be 200 or better. Tuition requirements would conform to other fields of study. The UAW would encourage worker enrollment.

Mr. O'Reilly said he felt that graduates of such a program would have a wide choice of opportunities to accomplish their individual goals and to satisfy their needs.

"It is in the interest of the UAW to join community colleges in seeking credit transfer and full accreditation rights for graduates of this program," he said.

He continued his presentation by describing teaching methods. Discussions, audio-visual support, role playing, workshops, and panels would be used to work toward the goal of maximum student involvement and participation. Mr. O'Reilly said he felt that colleges should experiment with techniques and methods of individual instruction, both tutorial and remedial. These approaches would be supplemented by seminars and field trips.

He also proposed that a labor advisory committee be formed, to be made up of representatives from organized labor. One important function of this committee would be to advise and coordinate with school administrators in the area of curriculum development. Mr. O'Reilly outlined specific committee functions: to advise in regard to training needs; to provide recommendations to meet these needs; to evaluate college programs in the labor area; to aid in selection of resources; to recruit worker-students and labor studies instructors; to publicize the labor studies program; etc.

He concluded his remarks by emphasizing that this degree program would be operated on an open enrollment program basis, and summarized by stating the prime purpose of a labor studies program—". . .to make available to the student the knowledge and skills required to move up in union leadership, to raise the quality of schools, and to add a new dimension to the quality of labor leadership. . . .This is an idea whose time has come."

4. Issues and Strategies

Dr. Mark Schulman, the last speaker of the session, read from his paper, "Issues and Strategies for Enhancing Participation of Labor in Career Education."

In June 1976, he was commissioned by the National Advisory Council for Career Education to write a paper explaining the relationship of career education to organized labor.

The paper points out that as students graduate from high school or college, they will probably have to deal with a union or an association at some time in their working lives. In view of this, there ought to be some connection with the information received in academia. Dr. Schulman's paper stresses that there is, therefore, a need for a comprehensive overview of labor, labor history, and social change, within the school environment. This could be accomplished by an infusion of labor studies courses into the school system.

Accenting the student's need to understand the contributions of labor to society, he quoted Gus Tyler, Assistant President of the International Ladies' Garment Workers Union, who said, "We need to revise the textbooks to show labor's contribution toward building this country."

Dr. Schulman closed by reminding the audience that there was a great heritage in the union movement.

Session 732
Labor Unions in Career Education

Junior Achievement Instructs Students in Free Enterprise System

Businessmen are attempting to counter inaccurate ideas about our nation's economic system with Project Business, an offshoot of Junior Achievement, Mr. Thomas Rutter, Executive Vice President of Junior Achievement (JA) of Northwestern Ohio, Toledo, Ohio, said.

Project Business is currently instructing over 6,000 eighth and ninth graders in over 33 cities in the way the American system of free enterprise works. Helped by a grant from the W.K. Kellogg Foundation of Battle Creek, Michigan, the program aims to expand to reach over 100,000 students in 175 cities by 1979.

According to Mr. Rutter, the project complements JA's traditional program which places 200,000 high schoolers into the business world of manufacturing and sales. Unlike the regular program, which puts adult businessmen into the simulated businesses of the students, Project Business brings business leaders into the classroom. There, usually as a part of social studies classes, business subjects like consumerism, money, banking, career choice, and economics are discussed.

Field trips are a popular part of the program, Mr. Roy Dangel, Executive Director of JA for the Akron

Area, Akron, Ohio, said.

"The kids get to see how a real business operates—all the pressures, joys, and successes," he noted.

He stated that Project Business tries not to encourage free enterprise "Bible-thumping."

Instead, it tries to give a positive view of the free enterprise system, "a system that's been run down a lot lately."

The regular JA program hopes to receive aid from Project Business. All students enrolled in Project Business receive a full orientation to JA systems. Normally, JA doesn't help nonhigh school students, but Project Business does, Mr. Dangel added.

In the normal JA year, students sell stock in and manage a mock company. The students decide upon a product, purchase raw materials, and then begin manufacturing. Ultimately they hope to turn a profit, which they will return to the investors.

At the end of the 7-month period (October-April) the best companies and managers are rewarded with certificates and, in many cases, scholarships.

"Best of all," the presenters echoed each other, "they get to see the real world."

Session 733
Junior Achievement in Career Education

Delaware Schools and Industry Join Forces to Aid Teachers

Representatives from the business and industrial community and the school system have worked together in Newark, Delaware, to form the Educational Resources Association (ERA), a career education resource bank for teachers.

ERA serves as a centrally controlled clearinghouse system of community resources, including guest speakers and field trips, to make them more readily available to all participating teachers, according to Mr. Douglas Hill, ERA Director.

Although ERA was established in January 1975, the impetus for it actually began three years ago when the Newark School District began a career education program, Dr. Primo V. Toccafondi, Coordinator of the Career Educational Instruction System for the district, explained.

"With a grant from Vocational Education Act (VEA) Part D funds, we began to develop a career education program, infusing career education concepts into the curriculum already being taught," Mr. Toccafondi said. "We tried to build community resources into the program by the use of field trips and bringing resource people into the classroom. Arranging these kinds of activities took a great deal of teacher time because they did not know how to go about the task and did not always receive the cooperation needed from the community."

He added, "Fortunately we had created a career education advisory council to provide articulation between the community and educators in the district. These people felt the program was important and said they would work to resolve these problems."

As a result of ideas discussed by a subcommittee, it was decided that a catalogue of resource people and field trips should be compiled, based on community resources, and should be readily available to teachers.

The school district made an educator available and E.I. DuPont De Nemours and Company, the largest employer in the State, loaned Dr. John W. Reynard, of its Employee Relations Department, Personnel Division, to coordinate the project, Mr. Toccafondi said. (Dr. Reynard is Codirector of ERA.)

Using the 15 occupational clusters identified by the U.S. Office of Education plus an inventory of occupations suggested by teachers as a guide, the committee began making contacts throughout the State, Dr. Reynard explained.

Thousands of people were contacted, told the benefits of the program, and asked to sign a commitment to participate.

"Over 1,200 resource people are described in the catalogue, and almost every teacher in the State has access to it," Dr. Reynard said.

Mr. Hill added that teachers do not have the names of these resource people, however.

"The catalogue is divided into specific occupational areas and when a teacher decides to have someone in an area come into the classroom, he or she contacts ERA to arrange it for them," he said.

ERA contacts a specific person in the occupational area and secures a commitment from him/her. Then the name of that individual is supplied to the teacher who arranges the actual classroom visit with the resource person, Mr. Hill explained.

"In this way we control the 'use frequency' of the resources, provide guidelines and assistance to the resource person and the teacher, and have a feedback system," he said.

Teachers and resource people are encouraged to work closely together to ensure the best possible presentation to the students. Booklets are distributed to them with suggestions on the presentation itself, and pre- and post-visit activities.

Although it began with three Delaware school districts in the fall of 1975, ERA now covers most high schools in the State, and more elementary and middle schools are being added, Dr. Reynard said.

"The program has been very successful. Over 90 percent of the businesses and industries we contacted have made a commitment to ERA and the number of teacher requests has doubled this year," he added.

ERA was initially funded through private, Federal vocational education, and State funds, but local districts are assuming more and more of the costs, Mr. Hill noted.

Session 737
Resource People in the Classroom

CIS Provides Current Job and Educational Data to Oregon Students

"It is difficult to locate a single source of detailed and accurate information that relates career opportunities to educational programs and the schools that offer them," said Mr. Paul Franklin, Coordinator, Technical Assistance, Oregon Career Information System, Eugene, Oregon.

"Current information about occupations, secondary institutions, and programs of study and training is sometimes fragmented and scattered. Occupational information is very seldom prepared for a user's specific locality or written in a manner which can be easily understood," added Mr. Steve Wall, Director, User Services, Washington Occupational Information System, Olympia, Washington. "Even if the information itself is correct, it still must be delivered in an attractive, motivational manner which can be updated easily. Moreover, even existing information is not readily available to nonschool publics."

In a session on Using a Comprehensive Occupational Information System, Messrs. Franklin and Wall described the Career Information System (CIS) as a direct response to the need for a single, efficient informational source relating career opportunities and decisions with post-secondary educational opportunities and choices. They said that the CIS operates as a Statewide interagency consortium which is providing current labor market and educational information to Oregon's student and social agency population. The CIS currently serves 200,000 users throughout Oregon.

The components of CIS have been designed to access computer-stored information via teletypewriter terminals or through a pin-sort system with printouts of the system's information bound in book form. By storing and accessing the data in a computer system, information is readily accessible to users in a variety of settings and can be easily updated.

Among the components of the CIS are: (1) QUEST, an introductory questionnaire that allows users to match their interests, aptitudes, and personal preferences as they see them now with prospective occupations; (2) a description file, which has information on 231 occupations that represent over 90 percent of Oregon's employment (users of the description file receive a 300-word description of job duties, working conditions, hiring requirements, and employment prospects); (3) a program file, containing information on post-secondary educational programs and training in Oregon; and (4) a school file, which stores information on all of Oregon's 2- and 4-year colleges.

The information contained in the CIS enables users to discover which occupations suit their preferences, values, and abilities and which programs of training will enhance their career development.

"The strength of the program," said Mr. Franklin, "is the motivational aspect of the program and the continuation of student use."

Session 743
Using a Comprehensive Occupational Information System

Georgia Educators Discuss Variety of Career Exploration Programs

Panelists from the Georgia educational system presented descriptions of a variety of career education programs offered in the State at a session on Career Exploration as an Element of Career Education.

Dr. Marion Asch, currently an Assistant Professor at the Virginia Polytechnical Institute, Blacksburg, Virginia, and formerly a faculty member, University of Georgia, Athens, Georgia, spoke first about the career exploration mini-courses in agriculture, business, home economics, and industrial arts offered to students at the junior high and middle school levels. The 9- to 12-week courses are designed to stimulate in participants a desire to explore various careers and achieve a new awareness of career opportunity.

The second speaker, Mr. Joseph Davis, a trainer of career exploration teachers at the University of Georgia in Athens, discussed the concepts of the Program of Education and Career Exploration (PECE). He noted that the PECE is a new approach to education allowing students to work for short periods of time in several different work settings.

"The program helps the student to begin to build a base of knowledge and experience to help him/her make future educational and vocational decisions. The PECE sets as its goal career exploration opportunities for all students regardless of sex, ability, or background," he said.

He stated that the program is open to all students in the seventh, eighth, and ninth grades and takes up one time period, five days a week. The students spend several hours on the job assisting a professional with tasks and discussing the job in a one-to-one relationship with the employer.

Mr. Davis mentioned that the students are not considered legal employees and therefore are not governed by the rules and regulations of the Labor Department. The employer's liability is the same for PECE students as it is for any visitor or customer, he said.

After completing the work period, students are encouraged to share their feelings and thoughts with other students in a group session, which is followed up by individual assignments related to their experience.

Mr. Davis emphasized the fact that the coordinator of such a program not only has to present it to

the faculty and administration of the school, but also is responsible for making contacts in the working community and setting up work conditions so that each student has an "experience" in all levels of occupational groups.

An explanation of Georgia Hi-JIVE (Job Information for Vocational Exploration) was provided next by Mr. John Clark, Director of Title III projects in Thomas County, Georgia. The Hi-JIVE is available in 80 schools in Georgia for grades 7 to 12, according to Mr. Clark. He stated that this system provides a means for both students and faculty to locate over 500 jobs and 100 training opportunities available throughout the State of Georgia.

"The system provides answers to essential questions which might assist students in making ultimate decisions concerning their educations and careers," he said.

The Hi-JIVE system, written at a sixth grade reading level, is set up on a series of 4 x 6" microfiche cards, each containing as many as 20 job titles of over 500 careers, organized into 15 different fields of work. Salary ranges and job conditions are also provided in the first deck.

According to Mr. Clark, the Program Deck is designed to provide information on training programs offered by Georgia. Each program has been crossreferenced and matched with particular careers.

He said that the Institutional Deck provides information about all post-secondary institutions in the State and answers questions concerning tuition and housing.

He noted that the Hi-JIVE also contains sections on decision-making, career exploration, and self-exploration.

Mr. Clark then described Special-JIVE, a program developed in the Thomas County school system for slow-learning students. The system includes 100 jobs which do not require a lot of training, in an attempt to provide job awareness for students with special needs, he said. The materials used in the program include filmstrips depicting people at work and explanations of the various jobs.

The next speaker, Ms. Mary Childs, Coordinator of Vocational and Academic Education, Central High School, Thomasville, Georgia, spoke about the Coordinated Vocational Academic Education (CVAE) program which she coordinates.

"CVAE is a vocational program for the underachieving student, who in all probability would not finish high school unless special needs were met," she said. "The program is designed to bring meaningfulness back to school, by setting up a curriculum which allows the student to see a relationship between education and career."

Ms. Childs now has 39 students in her program, who are "turned off" to school. She said she considers it essential to find out all information possible about the potential CVAE students, in an attempt to understand better why they are underachievers. She noted that the CVAE program attempts to "turn students on" to school and give them direction, while aiding them in discovery of themselves.

"The CVAE program is important to all aspects of society, from the student, who is provided with a second chance; to business people, who are supplied with trained, dependable workers; and finally to the community itself, which benefits by reduced cost due to fewer numbers of people on the welfare lists. In short, CVAE leads to a better relationship between the community and its schools," she said.

Both Ms. Childs and Mr. Clark spoke of the Georgia Pin Sort, a means by which a student may get a general idea of the types of careers in which she/he might be interested. Pin Sort consists of a stack of cards with a series of holes; each hole has a corresponding number, which is used to answer a series of questions. After determining an answer to a certain question, the student inserts the pin through the corresponding number. By shaking loose all those cards not in the pin, the student eliminates careers which do not require particular characteristics and skills which the applicant may possess.

Session 745
Career Exploration: An Element of Career Education

Teachers, Parents, and Community Seen as Key to Career Education

Three levels of involvement in career education and three key concepts of career education were enumerated by Ms. Eileen M. Scott, Area Coordinator for the Watertown Vocational, Technical, and Adult School, Watertown, Wisconsin, in her presentation on Basic Concepts of Career Education.

Ms. Scott claimed that without teacher awareness and knowledge of career concepts, career education is of no value. However, she recognized the need to implement career concepts without adding anything to what the teachers must already teach. Rather, she urged an infusion of curriculum and career education concepts.

To meet this end, Ms. Scott said that the Watertown public schools have offered courses for college credit to teachers and set up workshops away from school. The workshops, attended by educators, consultants, and professors, provide presentations of concept implementation and give teachers an opportunity to decide how they would implement the program themselves. As a result of the workshops, the teachers design a suggested guide which serves as a voluntary program for the schools, she explained.

"I believe that the role of parents in career education is crucial also," she said.

She cited a program whereby every second grader in a class has his parents come into class and show what they do—either at work, in the home, or both.

"In this way," she contended, "the whole classroom gets a broader understanding of what's going on,

because someone other than the teacher is telling them that they will need basic skills."

It's more effective, she added, when students can see why and where they will need these skills in the work world rather than just reading about them in books.

Regarding community involvement, Ms. Scott described the practice of schools setting aside a "career day" which she said "turns kids off." Instead, she commented that she advocates Career Search, a committee composed of Chamber of Commerce members and representatives from various service organizations, businesses, and industries.

"The committee does not do recruiting; rather it provides career instruction," she stressed.

Ms. Scott considers as the three most important career education concepts that an understanding and acceptance of self is important throughout life, that education and work are interrelated, and that individuals differ in their interests, abilities, attitudes, and values.

She summarized her views of career education by citing the motto of the program in which she works: "Watertown educates for career life development. A career doesn't end at retirement; rather, skill development is lifelong."

Session 747
Basic Concepts of Career Education

Rural and Urban Illinois Active in Career Education

Illinois is presently active in the field of career education in both urban and rural areas of the State.

The career education projects are parts of the Comprehensive Illinois Occupational Education Demonstration Center (CIOEDC), designed to demonstrate several K-14 career and vocational education activities that originally were sponsored by the Illinois Division of Vocational and Technical Education.

Career education activity in one urban Illinois program was described by Mr. Willis Shay, Director of Vocational Education at Joliet Township High School.

Noting that Joliet is located 40 miles from Chicago and has a population of 80,000, Mr. Shay told participants that Joliet had vocational programs in 1913 and passed bonds for vocational facilities in 1920.

"The setting for career education was already in Joliet," he said.

According to Mr. Shay, Joliet Township High Schools, in 1974, included 6,480 students. The high schools offer 13 different cooperative education programs involving more than 400 employers and 1,100 students, he said.

"Project JOLIET is living evidence of strong community involvement for the betterment of education. It embraces the heart of career education," he said.

Mr. Shay stated that Project JOLIET utilizes the community as a classroom and emphasizes interviewing and the world of work themes.

He noted that the term "community classroom" was coined to refer to planned, structured career visits to business, industry, and government facilities. He stressed that these community classroom visits differ from conventional field trips in that they emphasize active student participation and focus on people, not products.

At each facility, small groups of students interview a broad cross-section of workers at their work stations, Mr. Shay said. At each station, workers are observed using the same academic and social skills studied in school. These stations illustrate such concepts as accuracy and the need for math, he added.

"Project JOLIET is a grass-roots career awareness program; its mainstay is strong local support, not reliance on outside funding," Mr. Shay said. "This support gives credence to the program's stability and steady growth. Community support is a must. . .and it has been outstanding in Joliet," he added.

According to Mr. Shay, many people who leave our educational system are deficient in basic academic skills, often simply because they fail to see meaningful relationships between what they do in school and what they will do when they leave school.

He described a course called nucleonics as one example of the Joliet career education program.

"The course is not designed for the science whiz," Mr. Shay said. "Employment opportunities for the next five years are good for radiation technologists in many areas such as industry and health service."

He added that nucleonics teaches high school students the basic laboratory skills, as well as an orientation to the field of radiation technology, and thereby opens new horizons in diverse careers. In this course, students go on field trips and conduct experiments on basic principles such as radioactivity, fission, shielding, and nuclear disintegration.

"Career education projects are working in Joliet," concluded Mr. Shay. "If a program implemented in a school is a good one, then that program will remain after Federal money is gone," he added.

Next, Ms. Dorothy Lawson, CIOEDC Director, told how career education was set up in a rural community made up of three Illinois towns—Greenup, Jewett, and Toledo. She noted that the first step was formation of an advisory committee of project staff, school administrators, and teachers. The community becomes involved in the program through advisement, exploration,and work experiences, Ms. Lawson said.

"We were amazed at the number of organizations within 20 miles of us," she added.

Ms. Lawson described one program, the Work Experience and Career Exploration Program (WECEP), which helped youths become motivated toward education by providing supervised work experiences and opportunities to explore various career options.

A teacher-coordinator supervises the program and selects students, provides individualized study help, maintains records and reports, coordinates the program with other educational programs, and locates and super-

vises work stations.

She stated that each student is required to attend a WECEP class for one period a day and may work up to three hours a day during the school day. The curriculum involves problems encountered at school, home, or on the job. Field trips, speakers, filmstrips, and individual exploration projects provide students with wider horizons and higher aspirations, she added.

According to Ms. Lawson, several tangible results are evident from this WECEP effort: students have displayed a greater sense of responsibility in the classroom after assuming job responsibilities; the grade point average increased for 11 out of 12 students; 10 of the 12 students showed a marked decrease in absenteeism; and referrals for disciplinary problems decreased, she added.

Ms. Lawson noted that types of work experiences available to 14- and 15-year-old students because of their age, inexperience, and low level of competency are low-risk jobs that are allowed under the child labor laws. However, the students receive wages which provide the extra money which teenagers desire, she pointed out.

Session 748
Illinois Comprehensive Occupational Information Demonstration Center

Madison Develops Career Education Materials Selection Process

To give an example of a materials selection process, Mr. George Maki, Principal of Marquette Middle School, and Mr. Gene Sturdevant, Principal of Lakeview Elementary School, explained the process Madison, Wisconsin schools use to select material for career education programs.

According to Mr. Maki, the process tries to eliminate faults in programs which lead to stereotyping in career roles according to social and sexist bias.

"Materials selection is an important part of career education," he said in a presentation on The Effectiveness of Commercial Career Education Materials.

He explained that in Madison teachers have a lot of autonomy; thus it is hard to ensure correct selection of career education materials.

To regulate materials selected by teachers, Madison has developed a Program Materials Selection (PMS) process.

"When a teacher decides to start a career education program, first he or she must file a letter of intent with a PMS committee and receive approval to proceed," Mr. Maki said.

Next the teacher files a letter of documentation describing the design of the program and the need for materials.

He noted that after filing the letter of documentation, the teacher completes a Materials Evaluation Form, which is filed with the committee. After the material has been selected and evaluated for appropriateness, the PMS committee gives the final okay for the program.

The PMS committee consists of administrators, teachers, counselors, and a representative from the central education office in Madison, according to Mr. Sturdevant.

"The committee looks at the material for scope and authenticity from a career education point of view," Mr. Sturdevant said, "and this enables the teacher to look at the material more deeply and effectively."

He noted that the Materials Evaluation Form also assists the teacher to examine the material closely for stereotyping of careers.

To aid teachers to evaluate career education material, Madison has developed an Instrument for the Evaluation of Instructional Material for Social Bias.

"The instrument evaluates material for bias in terms of two criteria: the inclusion of nonEuroamericans and females, and a balance of stereotypical and nonstereotypical images of nonEuroamericans and females," Mr. Sturdevant explained.

Commenting that many of the materials used previously are inappropriate, he added that this instrument enables teachers to look for new materials and to supplement the old ones.

"This is a very effective method of evaluation and rational selection," Mr. Maki said, "because it puts the burden of proof on the individual who is using the material."

However, Mr. Sturdevant added that Madison hired a staff of five people for a Human Relations Department to ensure that the process is carried out.

Session 750
The Effectiveness of Commercial Career Education Materials

Rural Communities Use Variety of Approaches to Career Education

Presenters in a session on Career Education in Rural K-12 Settings told participants about four varied approaches to career education in four different rural settings.

A team of three fourth grade teachers started the career education program used in Cashmere, Washington and surrounding school districts. With the help of strong community support, a dedicated board of education, and administrative encouragement, Cashmere has developed a program applying the eight basic elements of career education to classroom situations, said Ms. Bernadette Griffith, Career Education Project Director for the Cashmere School District.

The first of these is educational awareness or making school work applicable to the real world.

Career awareness is designed to broaden a student's

awareness of occupational possibilities.

Self-awareness helps the students explore their own interests and realize their abilities through hands-on experience.

In order to grasp economic awareness, the students are exposed to financial management, basic principles of supply and demand, and distribution.

Students are coached in decision-making situations by participating in solving class problems. For example, the elementary students decide what specific tasks they will do on cleaning day, Ms. Griffith said.

Students acquire beginning competence by learning to identify different tools with different occupations.

The last elements stressed are employability skills, such as completing individual tasks, and appreciation and attitude or achieving satisfaction from the job one has chosen.

According to Ms. Griffith, every teacher developed techniques, procedures, and materials which complemented the existing school curriculum. This information has been bound into three career education activities guides, requested by and sent to over 200 school districts in the country. The Cashmere School District also circulates a newsletter among rural schools as an intercommunication device, Ms. Griffith said.

A project in Northeast Colorado has 14 school districts involved in the career education concepts and goals. The project, called the Board of Cooperative Education Services (BOCES), also uses a monthly newsletter as a communication device between the districts. Schools also exchange ideas by classroom visitations, said Mr. Al Renzelman, BOCES Coordinator.

Organization of this project requires one BOCES coordinator; a coordinator from each district, usually a school counselor; a representative from each school; and a cadre from each district made up of students and parents, Mr. Renzelman said. One of the goals established by BOCES is for every district to have developed a comprehensive, operational career education plan by 1979.

Some components to be included in the plan are job training programs, a placement program, and follow-up studies on all graduates. Another important component is for all students to have access to quality vocational guidance services. Mr. Renzelman noted that 80 percent of the students at one area high school became involved in vocational programs because the career education program made them see the true value of work.

The career education program at Mad River Green School District, Springfield, Ohio shows what can be done with what is at hand, according to Ms. Maryanna Elam, Director, Career Education, Mad River Green Board of Education. As an example, she said the district created a science lab out of a nearby wooded area. The students mapped out the whole area and identified and marked everything as they laid down a soft-wood-chip path.

Ms. Elam related that teachers from the seven schools which participate in the science lab realized a need for something similar in the humanities and fine arts area, so they decided to bring in authors and poets to work with students for 30 days at a time. They also brought in the Dayton, Ohio ballet company and the opera from Columbus, Ohio.

For the social studies lab the schools decided to have an international day, which Ms. Elam said lasted for two weeks. It featured foreign foods, music, newspapers, and politics.

According to Ms. Elam, the main problem with each of these labs is that everyone in the community wants to become involved and there is not enough parking space or building space to accommodate them all.

Ms. Elam noted that rather than moving each project as it is presented from school to school, the students are transported instead.

The labs have received subsidies from the National Arts Council and the State natural science program. Another good source for funding is the local university, Ms. Elam said.

Mr. Larry Etnire also works in a rural setting. In Oraibi, Arizona, he is the Curriculum Coordinator for the Hopi Health Professions Development Program on the Hopi Reservation. The Hopi Indians are willing to learn about the white world and how to get along in it, Mr. Etnire said, but they are also concerned with learning about their own world and how to continue it.

"During the Vietnam war, the Hopi Indians could get doctors to come to the reservation because it was the lesser of the two evils," Mr. Etnire said.

The alternative now is for members of the Hopi to enter the medical profession themselves. However, they face the problem of having no role models.

Mr. Etnire said it was decided to approach the problem from a career education standpoint.

The Hopi Health Professions Development Program began in 1973. It works through elementary schools, high schools, colleges, and the media to encourage students to enter the medical profession.

At the elementary level, career education specialists work closely with classroom teachers. All students are encouraged to explore a variety of occupations through role playing, hands-on experience, career games, and field trips both on and off the reservation. The upper elementary grades are urged to participate in health programs and visit local health centers.

The high school students are placed in summer internships in the health centers, Mr. Etnire said.

College students are encouraged to begin to consider seriously which professional area they are interested in pursuing. Selected students receive counseling for school selection, financial aid, and any assistance which may be necessary to complete the training and education to achieve their career goals, he said.

Session 751
Career Education Practices in Rural K-12 Settings

Does Higher Education Breed Job Discontent?

Flexibility and change are key components in reducing job alienation in present and future job markets. Because education is an integral part of career planning and development, it should be flexible to meet ever changing needs.

In the session Higher Education, Career Education, and the World of Work, this issue was addressed by Dr. David Gottlieb, Dean of the College of Social Services, University of Houston; Dr. Harold L. Sheppard, Senior Research Principal Investigator, American Institute for Research, Washington, D.C.; and Dr. Don Mankin, Associate Professor, Studies of the Future, University of Houston at Clear Lake City.

Dr. Sheppard stated that research indicates that job discontent is frequently a result of poor counseling during the choice periods of education. This results in mismatches between people and jobs.

He found that older workers with above average education had the highest level of job discontent. He said that this is partly attributable to higher expectations associated with increased education. The fact that people want and need change is another contributing factor that is frequently ignored by both public and private employers.

"Much of the disenchantment with work has to do with the surroundings," he added.

He said he feels there is a growing discontent on the part of young people due to "the failing economy, the rejection of supervisory authoritarianism, and the lack of job autonomy and meaningful learning experiences associated with today's job market."

Dr. Sheppard suggested that career education should take into account the entire life span of the student instead of focusing on one career.

"Career education has to 'wire-in' the thoughts of the individual over his/her entire life span," he said.

Professor Mankin expressed a great deal of concern with the future job market. He said he feels people are poorly prepared for changes that inevitably will take place with changing technology. He called on educators to help by focusing less on specific job skills and concentrating more in general areas.

"We should be less concerned with specific job skills in early life because we don't know what will be needed later on," he said.

He noted that concentration on general areas should provide people with more motivation to deal with a changing environment.

"Career education should not limit the individual. Education must be flexible enough to keep the individual flexible," he said. "Work organizations must also be better prepared for change."

Professor Mankin suggested educators can help maintain flexibility by "developing the *base* only on the elementary and secondary level," and by introducing as many career choices as possible.

Dr. Gottlieb stressed that there are growing numbers of job-alienated workers. (He emphasized that people are *not* work-alienated.) He said that this syndrome creates unrest and discontent that carries beyond the job and its effects are manifested by problems such as alcoholism, drug addiction, etc.

A primary concern voiced by Dr. Gottlieb is with the planners of career education. He feels there has been too much idealism.

"It's been too one-sided. Not enough attention has been placed on the planners' responsibility for the problems. . .Don't lay the burden of proof on the 'user'," he said.

Session 803
Higher Education, Career Education, and the World of Work

NALU Representatives Discuss Careers in Life Insurance

"Life insurance plays an important social role in society," said Mr. Bruce C. Hendrickson, immediate past President of the National Association of Life Underwriters and currently Manager of the American General Life Insurance Company, Houston, Texas.

"Life insurance protects individuals and their families from financial catastrophes and provides a means for sound long-range security planning," Mr. Hendrickson said.

He noted that the trade association for life insurance professionals, the National Association of Life Underwriters (NALU), is the oldest and largest trade association of its type in the world.

"The NALU began in 1890 because of a desire for effective self-regulation," he said. "The purpose of the association was to attain strength of unity and purpose in increasing competent and ethical life underwriters," he added.

Some of the NALU's activities included providing educational programs for its members and the public, Mr. Hendrickson said. These activities helped create and promote the American College of Life Underwriters and the Life Underwriter Training Council, he pointed out.

NALU Assistant Public Relations Director, Mr. John W. Galloway, Washington, D.C., explained recruitment for life insurance agents.

"We recruit agents from agent referrals, newspaper ads, centers of influence referrals, 2- and 4-year colleges, and interviews," Mr. Galloway said.

"Candidates must have structured interviews and aptitude tests," he said.

A pre-contract training period weeds out those who are not suited for the insurance business, he added.

"We let the applicant know what the insurance business is before he quits his present job," Mr. Galloway explained.

During this period the applicant studies the textbook and works in the field interviewing prospective customers, he said.

Session 805
National Association of Life Underwriters' Role in Career Education

From left, Mr. Melvin A. Mungin, Program Coordinator, Bronx Career Counseling and Resource Center, Bronx, N.Y.; Mr. John L. Staton, Field Placement Counselor, Auxiliary Services for High Schools, New York City Board of Education, Brooklyn, N.Y.; and Mr. Melvin Hadley, Program Coordinator, Center for Career and Occupational Education, New York, N.Y., in a session on Career Education Practices: Private Trade, Technical, and Business Schools.

Help Provided for Career Education by American Legion and Auxiliary

In her introductory remarks, Mrs. Helen Montgomery, past Department President of the Alabama American Legion Auxiliary, Greenville, Alabama, said that the American Legion has always taken pride in training American youth.

"The educational system should help everyone reach his/her highest potential," she stressed. "The American Legion and education are and always have been synonymous."

Noting that the Auxiliary education scholarship program makes it possible for any child to receive education, Mrs. Montgomery said it encourages students to select careers where personnel shortages exist.

"The Auxiliary and the Legion both support career assistance programs. With over 4 million members, the education of our youth has always been at the core of our belief," Mrs. Montgomery said.

"There are 22,000 teachers in Alabama. Our Legion membership represents every type of occupation imaginable. The Legion and the Auxiliary scholarship program are at the service of the American student," she said.

Mrs. Anita Barber, State Coordinator of Career Education, Department of Education, Montgomery, Alabama, explained the role of the Alabama State Department of Education.

Commenting that in the world of work, attitudes chiefly determine employability, Mrs. Barber went on to list the elements of career education employed in the Alabama school system: self-awareness, education awareness, career awareness, decision-making, beginning competence and skill awareness, employability skills, and attitudes and appreciations.

She mentioned that the Legion emphasizes the importance and value of human resources, and added that the Legion can provide material resources and already sponsors various oratorical contests.

According to Mrs. Barber, in helping to relate practical experiences about the world of work, the school system of Alabama offers a comprehensive approach to life as fulfilled human beings in a complex society.

Mrs. Barber said she feels that local Legion participation is essential. She called for published statements endorsing career education and contended that the American Legion and the Legion Auxiliary can show students how they can become better citizens.

In conclusion, Mrs. Montgomery said that the American Legion's aim is to interest and assist all students to further their education as far as their capabilities will permit.

"The Legion wants all needy students to contact their local Legion Post and its education and scholarship chairman will be happy to assist," she said. "In this way the American Legion and Legion Auxiliary can fulfill its goal: 'to give students who need a lift the help they deserve'."

Session 806
The American Legion and the Legion Auxiliary Education Scholarship Program

Oregon's Career Information System Really Works!

Information is one key component in career education. Oregon has designed, developed, and implemented with increasing success a computerized Career Information System (CIS) for use by secondary school students and the general adult population, stated Dr. Bruce McKinlay, Director of the Oregon Career Information System.

Based on the premise that part of career education is dealing with career choices, as well as career preparation, the CIS is designed to develop awareness of the myriad choices available to the prospective job seeker. Dr. McKinlay described the CIS as "an accessible and flexible system which can be used in a variety of contexts," and said that people learn more about different occupations from using CIS.

What Is CIS?

A career information system is best thought of as a library about occupational programs. It provides a way of finding relevant information about careers.

As Dr. McKinlay put it, "Some people know what they want, but most are at an early exploratory stage. CIS is a strategy for identifying relevant information."

According to Dr. McKinlay, the success of CIS is due, in large part, to an effective attempt to "humanize" a computer system. CIS establishes a dialogue with the user, whether he or she is a junior high school student, a community college enrollee, or a member of the general public. Through a series of questions and answers, CIS provides lists of occupational titles and descriptions, and voluminous supporting data for user follow-up. One important facet of CIS is to sharpen user awareness of what specific occupations really mean, entry requirements, job availability, and training opportunities. CIS provides a down-to-earth "snapshot" of the world of work, in meaningful terms, through computerization of large masses of data by a team of researchers and CIS staff.

What Does It Do?

Dr. McKinlay told participants that CIS presents lists of occupational information in response to a dialogue between the user and the system. Although there are many paths through the system, a primary entry point is via QUEST, a question and answer "screen." QUEST is a 24-item exercise which allows users to express their requirements for projected careers. CIS records these requirements, identifies applicable occupational groups, and prints a list of occupational titles, in groups or clusters of similar occupational types. From this and similar lists (produced by CIS in response to different QUESTs), the user can access supporting file information to obtain detailed job descriptions, bibliographic material, local resource availability, job preparation requirements, and lists of institutions offering courses leading to entry in specific job markets. Dr. McKinlay said that CIS shows the tradeoff between one occupational cluster and another by clearly describing the parameters which define occupational content.

How Does It Work?

CIS is composed of three types of files: (1) occupational types and descriptions, (2) educational programs (majors), and (3) educational institutions.

Dr. McKinlay noted that the occupation file was most relevant to the conference and postponed discussion of the other two types.

The occupation file delineates the basic functions of occupations, their role in society, job duties, specialties, types of employers, requirements for employment, the labor market, wages and benefits, characteristics of people in the field, and career outlook.

The information in this file, presented as a narrative, permits the user to determine how sure he or she is about going into a specific occupational cluster.

According to Dr. McKinlay, data are candidly presented, showing reality-oriented factors affecting career outlook.

The file is supported by five subfiles:

1. Bibliography file—refers users to additional documentation and information elsewhere available
2. Visit file—displays names of people in the community to call on and see
3. Club file—references relevant clubs and groups such as Junior Achievement, Explorer Scout posts, etc.
4. Preparation file—discusses ways to prepare for specific careers. It provides details on licensing requirements, specific educational programs as they relate to career entrance requirements, and how these relate to other methods of entry into that job market. This file also provides a list of institutions providing courses of study and/or training to fulfill the listed requirements.
5. School file—contains information about specific educational institutions, general entrance requirements, tuition estimates, and other supporting data. The file format is structured for comparability among institutions.

Who Uses It?

One measure of a system's success is its utilization. Dr. McKinlay said he estimates that two-thirds of all Oregon secondary school students use CIS an average of two to three times each school year.

Within the context of specific guidance and counseling programs, CIS is used by junior high school, high school, and community college students in Oregon, and is utilized by approximately two-thirds of all secondary school students. CIS is also used in vocational rehabilitation and correctional institutions, and State and private employment counseling service agencies, and is also available to the general public through the Oregon

State Public Library System.

Of the approximately 440,000 users per year, about one-half access CIS via teletype terminal, and about one-half use a needle or pin-sort version.

Although usage in community colleges is "hard to measure," Dr. McKinlay said he estimates usage at probably two-thirds of the registered student body, roughly one-third of total community college attendees.

How Did CIS Get Started?

Oregon established a consortium including the Oregon State Department of Education, the Oregon Employment Division, the community college system, and local user agencies. This consortium contracted with one institution with primary funding through a State agency.

Much research was done before actual implementation. It took about one year and a staff of five to convert existing data (from State and Federal agencies, trade unions, newspapers, periodicals, trade publications, and other sources) to a CIS-oriented structure.

How Is It Maintained?

Currently, four researchers update the data base. Although a CIS-type system can be housed in one central computer site (as in Minnesota), Oregon's CIS uses six regional mini-computers (HP 2000 Model C's and PDP 11's) to hold the 5 million characters of file storage necessary to maintain the system. The system is coded in HP BASIC and FORTRAN programming languages.

Who Foots The Bill?

The cost is allocated to school districts on a "fair share" basis. Dr. McKinlay's group projects usage (probably two-thirds of enrolled students) on a pilot basis and sets a pricing schedule on a per-usage basis. The cost includes expenses for staff work, researchers, operations, and terminal devices. This makes up the User Service Fee (USF), and is uniform across any one school district. The USF is proportional to usage from a high (for a pilot program) of $1.45 to a low (for districts with over 3,200 users) of $.54 per user per year. The Oregon State average is $.78.

CIS delivery costs are additional. These are costs for terminals, connect charges, telephone charges, and costs of actual computer time used. This boosts the total cost to an average of $3.00 to $3.50 per user per year.

An alternative to computer use is a needle or pin-sort version of CIS. This consists of decks of IBM computer cards and listings of the supporting files. The cost for the card deck, file listings, and file update printouts is $60.00 per year, to service about 200 users.

Can The CIS Concept Be Used In Other States?

A CIS-type system is currently in operation in nine States. Their approach parallels Oregon's in most respects. Code structures are similar but not standardized, and Dr. McKinlay reported that a move for standardization is underway. He said that the goal is to establish standard occupation codes across all States. At present Oregon and Washington are compatible, and Minnesota is converting to this structure. The source for codes is found in the Directory of Occupational Titles (DOT) and the U.S. Office of Education. Dr. McKinlay noted that he found the DOT codes to be "far too limiting, since most titles are organized on a socio-economic basis and this is not necessarily valid in a CIS context." Dr. McKinlay feels that career clusters make more sense.

The CIS strategy was to design a structure which could include any school and State data.

"CIS is generalizable," said Dr. McKinlay, "but it requires lots of work to fit within each specific State. This is because CIS is State-oriented from a data point of view. (The files refer to local supporting data.) The structure is global, but the input data are State-dependent."

The long-range outcome of CIS, with standardized terminology and file structures, would be an inter-State or national system.

Can Other States Use CIS Now?

CIS is oriented toward Oregon and therefore is not readily available, in a usable form, to other States as is. Dr. McKinlay encouraged other States to develop their own information data base.

He acknowledged that the QUEST portion of the system could, with some modifications, be made available to other States.

"But it is very important to get beyond simply listing a series of occupational titles, and get information about occupational content," he pointed out.

QUEST is seen as an access strategy to supporting files, not as the heart of CIS. Dr. McKinlay noted that students discover this rapidly.

"Initially, their use of QUEST is great. Later, they find that the information files are best, particularly the job description files," he said.

What About The National Information System, GIS?

The primary difference is that the data base for GIS is national in scope, whereas CIS is State-oriented. In terms of access strategy, the CIS subsystem QUEST is more explicit than comparable components of GIS. Additionally, the way in which the subsystems fit together as an occupational exploration tool is different, said Dr. McKinlay.

He went on, "There are differences in supporting files. The visit file does not exist in GIS. GIS has a scholarship file, not found in CIS."

He said that the average user time is comparable for the two systems.

Session 807
Occupational Information Systems: Their Importance for Career Education

Panel Provides an Overview of Cooperative Education

In a session on Career Education Practices: College-University Setting, a panel discussion was held outlining cooperative education from the educator's and the employer's point of view.

Ms. Janice Firestein, Associate Director of the National Commission for Cooperative Education, Boston, Massachusetts, coordinated the discussion.

Professor Nancy J. Caruso, President, Cooperative Education Association, Boston, first discussed the history of cooperative education.

She said, "Cooperative education is a form of higher education where students spend time both on- and off-campus. Students in the program are placed in off-campus jobs."

Noting that cooperative education began in 1906 at the University of Cincinnati, she explained that during the 1930's labor unions began to support it because the students in it were sons and daughters of union members.

"The Johnson administration was also helpful by persuading several private foundations to support cooperative education," she said. "In the late 1960's, the Foundation for the Advancement of Education also helped with grants."

She told participants that in 1970 the Federal government began to fund cooperative education efforts and recently Congress passed a bill recognizing cooperative education as a study program.

Professor Caruso said that 1,080 colleges and 200,000 students are now involved in cooperative education.

"The advantages to cooperative education are that students determine career choices; they get a better education; it lets students earn money; and students are more confident and mature when they graduate," Professor Caruso said.

She cited the advantages for colleges as "increased enrollment and students that are solid citizens."

Mr. Terry Slusher, Manager of Training and Development, the Lummus Company, Houston, Texas, then described the needs of employers and how cooperative education fulfills some of those needs.

He said, "To get profits we have to depend on our employees. Cooperative education can help obtain those profits."

He listed employers' needs which are related to cooperative education as follows:

1. Employers need a stable source of professional and paraprofessional employees. That source is college students, he said.
2. Employers need to improve screening processes in hiring. He noted that through cooperative education employers can look at the students and they can look at employers before students graduate.
3. Employers need to improve the yield and reduce the cost of campus recruitment.
4. Employers need to reduce training and orientation costs. When the new employee has already worked for an employer, he is already trained, he said.
5. Employers need to reduce early attrition and discouragement of new employees. Students can find out if they like the company before they actually go to work.
6. Employers need to maintain a high quality of personnel. He stated that going to college "only means that a student can learn" and added that employers do most of the training on the job.

Professor Jane Schacter, Coordinator of Cooperative Education, Northeastern University, Boston, Massachusetts, discussed a cooperative education model developed at Northeastern. She said that the program begins with pre-freshman get-togethers to inform students of the cooperative education program. Freshman testing, a strong freshman career orientation program, and work experience are utilized in the model. She cited other features of the program as being an upperclassmen career development program, placement centers, career and mid-career counseling, retirement counseling, academic advisory assistance, a resource center, and a bank of resource people who discuss with students how to achieve success in the working world.

Dr. Irwin Feifer, Director of Program Development, LaGuardia Community College, Long Island, New York, gave a brief description of and background information on the school, which is a cooperative education college. His talk was cut short due to time constraints.

Session 808
Career Education Practices. College/University Setting

School Without Walls Unites Business and Education

"Businessmen can give the student 'tangibles' in a field," said Mr. Edwin Thompson, Jr., Liaison to the School Without Walls Program, Student Community Services, Atlanta public schools, Atlanta, Georgia.

According to Mr. Thompson, in Atlanta education and business have always had a good relationship, and now they are cooperating to expose students to the business world.

"The program opens a channel of communication between business and education, causing business to get involved in education," Mr. Thompson said. "It also gives the student a perspective of industry and a view of the businessman at work in his role."

The main emphasis of the program is to expose students to career options and not vocational training, said Mr. Milton Lincoln, Associate Director of the Public Affairs Division of the Atlanta Chamber of Commerce.

The program requests business people to conduct a class at their business to explain their operations and job techniques, and familiarize the students with the careers their

business offers.

The program consists of three classes a week for 12 weeks, and each class is approximately 1½ to 2 hours long, Mr. Lincoln said.

"The program doesn't screen out students," said Mr. Thompson. "It is designed for all students. Usually trouble-makers excel since it gives them a chance to relate to a career."

Mr. Lincoln emphasized that the program is not a vocational education program.

"It is not designed to get jobs or to train students for certain jobs, but only to expose them to different types of careers and to teach them some of the skills and techniques of those careers," he said.

The program is offered to junior and senior high school students and gives five credit hours.

"Counselors have asked that the program give ten credits, though," Mr. Lincoln said, "because of the time involved in transportation. Sometimes it prevents a student from taking another course needed for graduation."

School Without Walls is a pilot program to "get the bugs out," he said.

"Our biggest thrust now is toward more supervision and evaluation," he added.

Students are graded on a pass/fail basis and a program supervisor incorporates their marks into a grade.

"Eventually we will have to get staff to monitor classes and supervise," Mr. Lincoln said.

Presently the program is in one Atlanta school and 22 students participate. Eventually the program will be extended to all 23 Atlanta high schools.

Mr. Thompson predicted that by the spring of 1977, 75 students would be enrolled in the program and by the fall of 1977, that number would increase to 300.

Mr. J. Frank Smith, President, Computer Management, Inc., Atlanta, Georgia, and Chairman of the Education Task Force of the Atlanta Chamber of Commerce, also participated in the discussion.

Session 809
Atlanta's School Without Walls Career Education Program

College and School System Cooperate for Career Education Program

A Federal grant from the Office of Career Education, U.S. Office of Education, is being spent in Vineland, New Jersey, on a massive project to teach principles of career education to guidance counselors, elementary school personnel, parents, and students in kindergarten through high school.

The program is being implemented and evaluated by member schools in the Vineland public school system and by staff members at Glassboro State College. Progress and procedures of the project were outlined in a session on The Counselor Educator in Career Education, by Mr. George S. Lulos, Jr., Director of Career Education, Glassboro State College, Glassboro, New Jersey; Mr. Fred Rosi, Director of Career Education, Vineland Senior High School, Vineland; and Mr. Ted Gustillo, Coordinator for Career Education Research at Glassboro State College.

To cover the extra teaching load created by the new career education curriculum, the duties for coordinators and counselors have been expanded. In addition to giving career advice, counselors now assume team-teaching responsibilities to emphasize the consequences of history and social studies on lifestyle and industry.

Counselors must now coordinate the efforts with teachers to obtain relevant speakers and field trips.

Mr. Lulos said, "Periodic meetings with the teachers can complement the counselors' teaching relationship. *Then* the teachers may be more willing to listen to what should be taught."

In addition, the counselors and coordinators are given tasks as community liaisons with the Chamber of Commerce for guest speakers. Placement responsibilities and subsequent evaluation are also included in the counselors' duties.

Mr. Lulos emphasized, "Everything that a counselor does has an important assessment dimension."

Evaluations conducted by Mr. Gustillo included a 10-year outlook on the local labor market, self-evaluations by students on career interest, a "cognitive opinionnaire" for parents, and several standardized achievement tests.

Counselors are trained in their new responsibilities and in the use of computers, data, and resource centers through in-service training and workshops.

Parents are exposed to career education in a Parent Education Program (PEP). Their courses are divided into sections for elementary, middle, and secondary levels, and are informal. PEP focuses on the understanding of children's developmental stages and on developing ways to use the home and neighborhood environment as a learning laboratory for self-assessment, decision-making, and work experience.

Elementary school career education programs are handled by one staff member in each of the 17 schools. The coordinator is responsible for stimulating use of career education activity guides. Recently, the curricula for grades kindergarten through six were rewritten to integrate career awareness into the traditional studies.

Students in the middle and secondary schools were given the chance to try out a career field on a volunteer basis. Over 500 Chamber of Commerce members in different occupations cooperated with the Vineland schools to match students to their preferred job sites.

Ninth and tenth grade students are enrolled in career education courses to reinforce the students' opportunities to focus on critical development concerns. Major concerns of the course include values clarification; decision-making; sex, race, and role stereotyping; lifelong learning; and exploration of specific careers. Guest speakers periodically visit the schools.

Session 818
The Counselor Educator in Career Education

New York Focuses on the Adult Career Changer

Ms. Francine Vernon, Ms. Vera Hannenberg, and Ms. Helen Weinberg discussed New York City's program for adults changing careers or seeking work after retirement. Following this, Dr. Patrick Montana described a program he developed to assist the adult American worker to plan a satisfactory future.

Ms. Weinberg (Coordinator of the Adult Education Unit, Center for Career and Occupation Education, New York City Board of Education) stressed the need for career education for adults.

"Career education for adults should be more sharply focused than that for K-12 students. Adults know they need some kind of placement or upgrading for work. They don't have eight, ten, or twelve years of schooling to taste, explore, and try different careers. They have responsibilities to meet," she said.

Ms. Weinberg noted that New York's traditional separation between academic and vocational education failed to respond to this need for focus, so by the mid-1960's these traditional programs were changed somewhat. She said that previously the foreign-born citizen was being given the language and math tools to function minimally in his new nation.

"Now, however, the need of the native-born citizen to be qualified to 'walk through doors now open to him' is recognized," she said.

She commented that Federal funds became available to upgrade literacy, through the Office of Educational Opportunity and through legislation.

"Eighth grade literacy training was made widely available, but this, when achieved by the older worker, was found not to be a salable skill," she said. "One needed specific job skills."

Through the Vocational Education Act, older people entered programs for more job training, but it was found that they could not perform adequately in reading and math for many crafts.

Noting that the older worker needed sharply focused career training, Ms. Weinberg said that today's career education program for adults in New York City seeks to fill this need.

Next, Ms. Hannenberg, Project Coordinator, Office of Planning, Research, and Evaluation, New York City Board of Education, described this program.

"Those who plan for themselves avoid having someone else, who knows less, do it for them," she observed.

She said that helping people do such planning, by "creating a comprehensive system that ties together various components required to render an individual in need of upgrading or training, employability on a sustained basis" is the mission of the career education program for adults in New York.

Calling honesty and realism basic to this mission, Ms. Hannenberg stressed the need for the individual to evaluate himself/herself, his/her abilities, and his/her needs.

She added that realistic aims in terms of funding available, and willingness to fight for the funds that are available, are also essential.

"Staff must also realize that craft skills require of individuals abilities many college students do not need," she said. "Thus teachers in adult academic programs must be aware of such job demands."

Career education in New York City has for its goals "a long-range process in transforming isolated enclaves into a mixed delivery system that will give (1) guidance and decision-making development; (2) basic tools required; and (3) decision about a realistic employment choice," Ms. Hannenberg stated.

She said that assessing the job market accurately is a challenge in New York. What skills will be needed today? What are the job opportunities for those skills? What will be the skills needed in the future? Such questions, in a changing economy and in a technologically dynamic milieu, are rendered more difficult by the fact that data available to planners in career education are three years old. However, she noted that most programs are served by advisory committees of business, labor, and industry, which supply realistic information on the job market, present and future.

Ms. Hannenberg told participants that evaluation of the New York City program is ongoing and to date has indicated that, within a year's training in upgrading job skills, 80 percent of a typical group of 35 individuals will have reached their goals.

The final speaker, Dr. Montana, President of the National Center for Career/Life Planning and President of the Professional Institute of American Management Associations, described the increasing need for the older worker to plan job strategy. He said that Americans 40 years of age and older constitute an increasing segment of the population. Among those, he noted that many are unhappy in present jobs; many are retired or about to retire and wish further employment; and many feel they need further training in their present jobs.

"There is a human responsibility to fulfill one's potential. To do so, one must make a personal inventory, and then ask: 'Where am I heading? What do I want?' Many people let things happen to them," said Dr. Montana, "but those who do plan a life strategy generally get rewards."

To help with this strategy, Dr. Montana has developed a two-hour cassette program, with two manuals, entitled, "You *Can* Change Your Life." The program can be used alone at home, or in groups. He contended that by going through this process, the individual is forced to face his future and thus to deal with it.

Session 819
Career Education for Adults Undergoing Career Change or Retirement

Career Development Center Revitalizes Jackson Public Schools

Jackson, Mississippi is a city of approximately 300,000 people, 28,000 of which are students. Within a year's time of a desegregation order, Jackson lost 10,000 to 15,000 students because of integration and forced busing. Attendance zones were changed twice during that year and this involved both students and teachers.

According to Dr. Robert Fortenberry, School Superintendent in Jackson, the problems of integration in the Jackson schools created a strong cloud of doubt on the viability of the school system.

"People thought the public schools could no longer provide a good education for their youngsters. Eleven private high schools evolved out of these problems," he said.

He told participants that in 1973 the Jackson school administrators were looking for a master plan which would bring the school and community closer together and at the same time would help the students.

"We saw career education as a possible solution to our problems," he said.

With the help of the Chamber of Commerce, PTA groups, and the State Department of Education, the Jackson School District approached the State legislature for assistance in building a career development center. With the support of a great many people, the district was able to obtain local (through the sale of real estate), State, and Federal funds to build this career center.

According to Dr. Fortenberry and copresenter, Ms. Lora Chappel, Jackson Board of Education Secretary, the center has meant a turning point in the Jackson, Mississippi schools. The center serves eight high schools and is available for community functions at night.

"The entire project was a community effort and became a vehicle to serve the children of Jackson as well as develop community support of the schools. Even the selection of the site of the center was a community effort," Dr. Fortenberry said.

Ms. Chappel added, "The building of this structure has created a true partnership between the board of education, school administrators, and the community of Jackson, Mississippi. We have learned that through career education, parents, board members, and lay people can work together."

Session 820
The School Board Member in Career Education

Texas Teachers Attend Career Education Training Program at Education Service Center

The Texas Educational Service Center (ESC) in Region XVII, which began with the Brownfield School District in 1972, has mushroomed. It now incorporates 18 additional school districts in the Lubbock, Texas area.

"Every district has chosen a model of a successful career education program, but without systematic control the programs would not have continuity," Mr. Travis Brown, Career Education Facilitator at the ESC located in Lubbock, said.

The service center is a nonregulatory agency established by the Texas legislature. Local funds for each enrolled student from each district are matched by State funds. Additional revenue comes from renting career education materials to the districts, Dr. Woodie Coleman, ESC Project Director, said.

Mr. Bob Conger, Superintendent of the Denver City School District, explained that a method was needed to teach the teachers about career education. He noted that in each district, one teacher was selected from grades K-6 and one teacher from each subject in grades 7-12. They were all given release time and sent to study career education at the service center, Mr. Conger said. When they returned to their home districts, they taught the principles of career education to the faculty.

Each teacher writes a lesson plan and turns in a model career education assignment to the service center each year. This material is put in a resource file in order to keep an abundant supply of career education material circulating throughout all participating districts. Mrs. Leta Conger, a teacher in the Denver City School District, said the teachers have begun to share ideas and concepts.

The reasoning behind the ESC training program is two-fold. Staff limitations prohibit sending out a representative to each district. Also, with the teachers bringing back career education information into the home district, there is a feeling of transfer of ownership, Dr. Coleman said, yet the training program is able to establish a common career education format for all districts to follow.

Session 822
Systematic Management of Career Education Programs

Novick Deems Central Jersey Industry-Education Council a Success

Discussing industry-education councils in career education, Mr. Bernard Novick, Associate Director of Career Planning and Continuing Education in the Woodbridge Township School District, used the Central Jersey Industry-Education Council (CJIEC), of which Woodbridge Township public schools are a part, as a successful example.

He described CJIEC as a nonprofit organization sponsored and supported by the Woodbridge Township public schools in cooperation with nearby school districts and the New Jersey Department of Education, Division of Vocational Education.

According to Mr. Novick, the council was organized to develop communication and cooperation between the business, industry, and labor community and the education community, and to provide interaction and relevant education for both.

"Industry, which we consider to be anything other than schooling, gets together with people in the community as equals in a debate to determine what the problems are in the schooling of children. We also determine how we can attack these problems together," Mr. Novick said.

Mr. Novick noted that CJIEC set seven goals for itself to create an atmosphere where:

1. Students will have accurate and appropriate information when they make decisions relating to career development.
2. All interested students will receive realistic training for careers in business and industry.
3. Educators will be aware and open to career opportunities in business, industry, and government and realize the role of education in helping students reach their career objectives.
4. Industrialists, business people, and labor leaders will complement educators in preparing students to become responsible adults.
5. The resources of industry and business will be available to educators.
6. Parents and community members will be aware of and appreciate the career opportunities for their children in business and industry.
7. School systems will cooperate with each other and with the industrial, business, and labor communities for the common good of all.

Mr. Novick said that, in striving toward these goals, CJIEC has strengthened staff and curriculum development in areas like career and economic education. He stated that it has also strengthened career guidance and job placement programs in member schools as well as initiating work experience projects and bringing in new teacher-student materials.

Mr. Novick told participants that CJIEC has prepared what it calls Professional Training Packages. These include packages on how to run a countywide job placement program, how to run a career guidance fair, and how to infuse career education in teaching. Each of these programs is available for schools and teachers.

Session 826
Industry-Education Councils in Career Education

General Motors Provides Hands-On Experience for Ohio Students

The Packard Electric Division of General Motors Corporation is providing hands-on experience for school children in Warren, Ohio. Packard is involved in a program enabling students from the Warren schools to participate in the manufacturing process by observing the different job functions in the plant on a firsthand basis.

Mr. Donald Mumford, Coordinator of Public Relations for the Packard Division, told participants, "The student sees specific areas. Electronics lends itself to hands-on experience."

According to Mr. Mumford, each student is treated as a new employee in the introduction to Packard's world of work. Prior to the actual visit, a Packard representative meets the pupils in their classroom in order to familiarize them with the job functions they will see.

The program increased plant efficiency by 100 percent, he said.

Mr. Michael Zockle, Director of Career Education for Warren schools, expressed the hope that other businesses would get involved in the program.

"When they become interested, they become committed," he said.

Mr. Zockle noted that all schools want to participate, but there are not enough businesses in the program. He said that he feels the automobile industry is an especially good one for career education.

"I think the automobile industry and the schools go hand in hand," he commented.

In addition to the Packard plant approach, there are other groups within Packard, such as the Future Black Engineers Program, in which minority students are made more aware of careers in the engineering field.

Ms. Mary Jane Taylor, Public Relations Manager for Packard, said she feels that the students are gaining a lot from the experience.

One letter from a student read, ". . .I really would be glad to have a nice job for a long time and wonderful life there in your company."

Session 827
Career Education Commitment of General Motors Corporation

Denver College Conducts Career Exploration Program in Nontraditional Jobs

A workshop in career exploration for unemployed and underemployed women in nontraditional job areas was conducted by Mrs. Josie Heath and Dr. Dorothy Lawrence.

Mrs. Heath, Director of the Women's Center at the Community College of Denver, Golden, Colorado, began by stating that options are limited for women in the work force. She stressed the fact that women with college degrees are, on an average, earning salaries equivalent to those of men with eighth grade educations.

Mrs. Heath told participants that the Community College of Denver, a comprehensive 2-year school, received a grant to conduct a 3-week program of career exploration in nontraditional jobs. Out of over 100 applicants, 50 people (49 women and 1 man) whose ages ranged from 18-53, were chosen to participate in the program.

"When the program began, fear was a dominating factor. Not quite sure of what lay ahead of them, the group ventured forth, trying several types of work, in an effort to find out which environment suited them best," she said.

She noted that the fear was soon replaced by enthusiasm as those taking part in the program began to evaluate their own strengths and weaknesses, discard roles, and set new values and goals for themselves.

"Women were seen doing welding and plumbing, driving trucks, and even assisting in fire station procedures. Such settings brought to the group realities of the work environment outside of the office and classroom," she said.

Mrs. Heath related that during the 3-week program, job search sessions were held during which a videotape was made of the women being interviewed for prospective jobs. The tapes were then played back and critiqued.

Dr. Lawrence, Dean of Occupational Studies, Community College of Denver, mentioned that the total cost of the program was $4,500, in the form of a grant by the State Department of Career Education, which was matched by the college. She added that the career exploration program in nontraditional jobs was considered a success and another grant has been awarded to the school, for a second program.

According to presenters, the major success factor in the program is considered to be the fact that the staff personally contacted the area employers and urged them to participate.

"This personal contact opened many union, labor, and management doors," Dr. Lawrence commented.

She mentioned that counseling for the program was done on a one-to-one basis; free child care was provided to those who participated in the program; and much of the necessary moral support and encouragement came from peer groups and parents.

Presenters noted that new vocational education legislation has made available to each State $50,000 for use in the reduction of sex role stereotyping.

"Perhaps one day, sex roles will be discarded and women will live a more fulfilling life in the careers of their choice," Dr. Lawrence concluded.

Session 828
Career Education: Women in the World of Work

Jorge Gonzales, a student at Pershing Junior High School, Houston, Texas, learns principles of electroplating at the Utah State Board of Education Industrial Arts Career Exploration exhibit as Mr. Tom Isom, a Utah junior high instructor in industrial arts, looks on.

Survey Reflects Positive Attitude of Labor Unions Toward Career Education

Involvement of community groups in curriculum decisions is supported and encouraged by professional educational associations, by legislation and local mandate. The National Commission on the Reform of Secondary Education says that "schools will not be able to achieve their purposes without increased help from the people in the communities they serve." A task force of the National Association of Secondary School Principals emphasizes that in matters of planning and organizing for achieving the intended purposes of schools, "the cooperation of the community is essential."

Career education offers a unique opportunity emphasizing that involvement. The business-labor-industry community constitutes an important external body to consider in curriculum planning for career education. Of these groups, little attention has been given to labor groups, their perception of the importance of career education, and their role in cooperating with schools in curriculum development.

To provide an idea of the attitude of labor groups toward career education and their perceptions of their role in cooperating with the schools, Dr. Claude Duet (Assistant Professor of Education) and Dr. John Newfield (Associate Professor of Education), both of the University of New Orleans, conducted a survey of leaders of labor organizations in the metropolitan New Orleans area.

Results of the survey were incomplete at the time of their presentation at the Commissioner's National Conference on Career Education in November 1976. However, Dr. Duet said that one-third of the target population had responded to the survey, presenting a positive view of the general attitude of labor to four major areas of consideration relative to career education.

Labor leaders expressed a high degree of support for career exploration as an important element in career education. They agreed that schools should provide job training, but were relatively divided in their feelings as to whether students' attitudes were more important than specific job training. Respondents expressed varied attitudes toward the school's role in providing specific work experiences for pay or for credit. They did express strong disagreement regarding students being allowed to leave during the school day to go to work. They expressed the sentiments that high school graduates are not prepared to enter the world of work and were very positive in their support of vocational education.

Labor representatives indicated a high degree of support for a range of collaborative activities from assisting in determining course content to serving as resource speakers. With the exception of a lower rating for labor involvement in teacher selection and training, there was marked agreement in support of an active role in the cooperative process.

Respondents to the survey tended to agree that the diverse interests of labor groups hinder cooperative efforts with schools. One major finding was a strong rejection of the proposition that labor groups oppose cooperation for their self-interests, and respondents rejected implications that labor would oppose programs which might provide an oversupply of workers.

A summary of the findings indicates significant potential for increasing voluntary involvement of labor in the curriculum development process of the schools. This study indicates that there are many specific activities which labor sees as its role in cooperative efforts and is willing to perform.

Following the presentation by Dr. Duet and Dr. Newfield, Mrs. Claire Rosenberg, Business Administration Instructor at the University of New Orleans, explored the question of how the subject of labor unions is treated in textbooks and by teachers. She said that a review of current literature indicates there is a significant number of texts offering teachers the opportunity to deal with the subject of labor in meaningful and insightful ways. Some examples she cited include *Rise of the American Nation* (Todd and Curti, 1972), *The Adventure of the American People* (Graff and Krout, 1973), *A History of the United States* (Wade, Wilder, Wade, 1970), and *Exploring our Nation's History* (Schwartz and O'Connor, 1969).

Since recent studies confirm that labor's role in society does not receive fair treatment in social studies and American history courses, Mrs. Rosenberg suggested that labor create interest and encourage teachers to implement more objective programs and provide a more balanced view of the labor union movement.

"There is an obvious failure of teacher organizations to exercise influence and/or pressure upon teachers to seek out the best materials on labor and then to teach them with bold integrity," she said.

Mr. Gordon Flory, Executive Director of the AFL-CIO from Baton Rouge, Louisiana, related his personal involvement in labor union activities dealing with the development of career education in the schools and described a variety of work experience programs in operation in Louisiana schools.

Mr. Flory advocated the implementation of work-related educational experiences. He also stressed the importance of counseling and recommended that counselors be trained in specific skills of work counseling.

Session 831
Labor Unions in Career Education

Explorers Help Familiarize Students With Career Alternatives

The Explorer program helps students to become familiar with businesses, professions, associations, trades, and institutions, said Mr. Douglas A. Heesten, Explorer Coordinator from Akron, Ohio. Mr. Heesten presented a series of slides showing student participation in the Explorer program begun in 1968. He noted that in 1971, the program became coeducational and 34 percent of the membership are now women.

This program is offered throughout the United States, wherever Explorer posts are located, for a $3.50 membership fee per year.

After Ms. Audrey F. Clough, national Explorer staff, spoke of the HEW grant awarded to the Explorer program for career education, Mr. Greg Holt, Explorer Director in Portland, Oregon, discussed his program being implemented in the Portland School District.

He noted that seminars in career exploring are offered throughout the year using community volunteers as guest lecturers.

Mr. John Milton, New York City Explorer Coordinator, said that in New York cooperative programs were sponsored for ninth graders in 24 career areas. Peer leadership is involved and career choices are made and studied, he said.

Mr. Ron Walker, Minneapolis Explorer Coordinator, described an in-school program which provides qualified people to discuss their jobs.

Mr. Mike Clayton, Oklahoma Explorer Coordinator, said he felt that student aspiration levels are lower in rural areas and urged that students be made aware of career opportunities.

Mr. Willie Iles, Jr., Houston Explorer Coordinator, discussed ways in which programs can get people to participate in district, local, and divisional activities.

In conclusion, presenters noted that the combined efforts of the Explorer programs throughout the United States relate directly to student awareness of the opportunities offered to them in their environment. Awareness is an essential factor for motivation and Exploring provides many ways for youth to gain career awareness, they said.

Session 832
Explorer Scouts in Career Education

American Legion Pledges Support to Career Education

Goals of the American Legion in career education were discussed by Mr. Ronald A. Murphy, a National Executive Committee member.

"We want to continue our strong association and support with the schools," Mr. Murphy stated. "We have always been dedicated to career education."

He cited the Legion's baseball and scholarship program as examples of the Legion's work with education and the community.

Mr. Murphy discussed the continuation and strengthening of the "Need a Lift" service. "Need a Lift" is a booklet describing educational opportunities involving financial aid and scholarships for the interested student, and listing sources of career information for the student's use.

Speaking about harnessing the community's resources to strengthen the American family in a program called Parents and Children Together (PACT), Mr. Murphy said, "This program is initiated to create and sponsor activities to get the young people involved in a positive way in the community."

Mr. Murphy explained the American Legion's career education program called CHOICE (Community Helping Organizations in Career Education).

He said that a special committee appointed by the National Commander proposed the concept of a career education program. He noted that materials are presently being developed for an American Legion and Auxiliary career assistance program designed to prompt 16,000 Legion Posts and 14,000 Auxiliary Units across the country to participate in various career education activities.

Resource speaker services for the schools, sponsorship and involvement in career day programs, and development at the Post level of career packets that will permit hands-on experiences in many occupational areas represented by the Legion and Auxiliary members are a part of the program, he said.

Also mentioned were the recognition events to honor teachers and citizens involved in effective career education activities.

"We aim to provide direct work exposure to young people in schools by hosting them in our respective places of occupation, either as observers or as job trainees," he concluded.

Session 833
American Legion Efforts in Career Education

West Provides Ideas for Career Education Learning Centers

According to Ms. Doris West, Career Education Consultant, Region XI Education Service Center, Fort Worth, Texas, there are numerous ways to infuse career education into the classroom to encourage career awareness and development of student interests, skills, attitudes, values, and abilities. Noting that the structure of a classroom will dictate how a career corner can be created, Ms. West remarked that an abundance of wall space would be appropriate for a poster career education corner, whereas a large amount of floor space could accommodate tables and various displays.

Ms. West suggested that, as part of the career awareness program, a series of fifteen Popeye career

comic books could be used. She said that each book emphasizes an occupational cluster and describes many of the jobs found in the respective cluster. Ms. West also suggested the use of flashcards depicting varied careers.

She said she felt that a multimedia approach is effective for introducing and emphasizing the development of good work habits. During the session a filmstrip was shown that presented different employees on the job who exhibited both good and bad work habits.

Ms. West stated that it is important to emphasize to students the responsibility and significance of listening and noted that cassette tapes can be very useful to do this. She also told participants that a variety of activities have been designed to improve skills for following directions, both written and oral. As an example, participants took a simple test during the session consisting of statements which gave specific directions for them to follow.

Ms. West said that a bulletin board can be used to describe the duties assigned to a different student in the classroom each week. Students can submit letters of application for the various jobs, with the selection of the student depending on the best letter of application, she said.

Ms. West concluded by discussing the traditional decision-making process that includes defining the problem, identifying goals, considering the choices, studying the outcomes, and making a decision in terms of the goal. She suggested the addition of a sixth element in this process, namely learning to live with the decision once it has been made.

Session 838
Learning Centers in Career Education

Rhode Island Presenters Describe Potpourri of Career Education Programs

In a session dealing with career education in Rhode Island, Dr. Robert Brooks, head of the Manpower Administration in the Providence, Rhode Island school system, introduced Mr. James E. Sullivan, President of the Rhode Island Career Education Association and Coordinator of Career Education in the Cumberland School District.

Mr. Sullivan described the State's commitments to the conference's goals and showed participants cardboard plaques signed by students, teachers, administrators, a Senator, and the Governor-Elect. He noted that, in the preparation of the placards, the Association found new allies in industry. Next, he introduced a representative from A.T. Cross Co., who outlined her company's affiliation with the career education program and showed how the program had brought job placement to Rhode Island youth.

Mr. Joseph Dailey, Coordinator of Special Educational Vocational Training in the Cumberland School District, then discussed his program, called Project AWARE, which "turns people with IQs ranging from 30 to 60 into functioning members of society." There are 65 children in the program now on a full-time basis, and more part-timers. The project looks for feedback from parents in their homes, has workshops in the most basic special education skills, and has graduated five students so far.

"It's expensive, as any special education program is, but we're working on things that are practical and functional, things our kids can do," he said.

Dr. Brooks then introduced Ms. Karen Lee Carroll, Project Director of the Career Education Center in the Arts, Providence, Rhode Island. Ms. Carroll noted that she works with students particularly gifted in the arts who have both talent and motivation.

"Our center first gives our students a self-awareness of where they want to go in the arts, and where the arts can take them," she said.

Panel groups are established with working artists to give the students a feel for what they may be doing themselves later on in life.

"It introduces students to the broad range of careers in either making products or getting them out. There's always the question of a finished piece that has to be sold to put bread on the table, and we deal with this dilemma, for example," she said.

Ms. Carroll's program also works to educate parents to the skills and possibilities of their children, and what they can do to help. But again, funding is limited, and there is presently only one center in the State. This problem is also apparent in Mr. Dailey's program, which has to choose the most educable children within only one of Rhode Island's many school districts.

Session 840
Career Education for the Gifted and Talented

Participants Learn About Armed Services Vocational Aptitude Battery

Dr. Harry Wilfong, Technical Advisor for the U.S. Military Enlistment Processing Command, Fort Sheridan, Illinois, and Mr. Grover Diehl, Education Coordinator for the U.S. Army, Montgomery, Alabama District Recruiting Command, Gunter Air Force Station, Alabama, discussed the Armed Services Vocational Aptitude Battery (ASVAB).

Dr. Wilfong said, "Below career education is career awareness, and here is where ASVAB fits in. High school juniors and seniors must be aware of what is available in terms of jobs, and ASVAB translates knowledge into job information."

Dr. Wilfong explained that the

ASVAB tests measure three things: technical knowledge, academic knowledge, and the ability to follow directions.

"No other test," he said, "does the same thing, and ASVAB is available without obligation to high schools."

A film shown about ASVAB stressed that the test is not absolute and test information must be supplemented. While ASVAB shows aptitudes, students may need to match them with their interests.

The film also stated that results are provided in color-coded percentile rankings. For example, percentile rankings within the green section show that a student might do well in a given area; the yellow section suggests that a student might have some difficulty; and percentiles in the red area suggest that a student might not succeed in that area without a lot of hard work.

The film also emphasized that ASVAB shows aptitude, but that aptitude does not necessarily conform to interest. Consequently, one does not have to follow the highest aptitude score on the ASVAB test.

"ASVAB merely shows the strengths of a student. It is meant only as a guide in career planning, not as an absolute dictate," Dr. Wilfong said.

According to Mr. Diehl, for vocational counseling ASVAB gives the student information and assesses a student's ability.

Noting that ASVAB can be useful in a school district's counseling and administrative efforts, Mr. Diehl said that it is "very easy" to have group counseling based on the ASVAB results.

For instance, he suggested that students with common aptitudes might take turns reporting on different occupations relating to such aptitudes.

Mr. Diehl added that administrators might use the ASVAB results to compare their school district with others across the country.

Session 843
Using the Armed Services Vocational Aptitude Battery in Career Education

Dr. Corinne Rieder, left, and Ms. JoAnne Calderone, right (both with the National Institute of Education's Education and Work Group) describe NIE educational products to a participant.

Mr. Duane Altig, State Consultant in Career Education and Economics, State Department of Education, Portland, Oregon, in a session on Curriculum-Infusion Approaches to Career Education: K-12.

Powers Says Career and Vocational Education are Symbiotic, Not Synonymous

"Career education is a concept; vocational education is a program," Ms. Kim Powers, Coordinator, Career Exploration and Guidance, Division of Vocational Education, Indiana Department of Public Instruction, stressed.

"Career education ought to be infused into the curriculum, not added on or tacked on," she continued, "and it shouldn't be taught just once a day or once a week. It should be infused in everyday teaching. There is no time to add another area to an already overcrowded curriculum."

Ms. Powers called the career education program a "womb to tomb" process not designed for select groups only. She commented that the kindergarten through adulthood program opens options to all individuals.

In addition to career awareness, she noted the other elements of the Indiana career education program as: self-awareness, social awareness, planning awareness, educational awareness, economic awareness, and employability skills.

Ms. Powers added that, for success, career education depends on business, industry, and government for assistance in expertise and implementation.

"We believe that vocational education has a part to play in each stage—i.e., from kindergarten to grade five, the introductory stage; sixth to eighth grade, the exploration stage; grades nine and ten, the investigation stage; and grades 11 and 12, the experience stage," Ms. Powers explained.

"Career education seeks to make education more relevant; it's like an umbrella and vocational education is one of the ribs," she said.

Career education and vocational education are not synonymous, but they are symbiotic, Ms. Powers claimed.

She continued to emphasize the importance of vocational education in the experience stage (grades 11-12) and noted that it aids in the development of specific skills. She added that vocational education works closely with business, industry, and labor, to acquire material resources from them.

Session 847
Career Education and Vocational Education

Chamber of Commerce, Industry, and Schools Work Together in New Mexico

The State of New Mexico has unique problems which several school districts, in cooperation with their local Chambers of Commerce, businesses, and industries, have taken into consideration when developing career education programs, according to Dr. Orval D. Hughes, Professor of Education at New Mexico Highlands University, Las Vegas, New Mexico.

Dr. Hughes, along with school district, industry, and Chamber of Commerce representatives from a total of five different counties in New Mexico, told of approaches to career education in their communities.

Many small communities face the problem of rural isolation, Dr. Hughes said. Some school districts are so large geographically that administrators travel hundreds of miles between schools.

"New Mexico has the second largest percentage of bilingual population of all the States," Dr. Hughes added. "Thirty-five percent of our children are bilingual and we have 22 native American Indian tribes in New Mexico."

The State also is a retirement center.

"One out of five citizens is age 60 and over," Dr. Hughes said. "We have more people over 60 than children in grades K-12, so we have to look at lifelong problems in relation to career education."

At the same time, the population in some areas of the State is doubling because the oil industries are moving in to work the expanding uranium mining industry, one of the largest industries in New Mexico.

Businessmen involved in the Chamber of Commerce are aware of the need for career education in the school systems, Mr. Harvey Whitehill, Secretary-Treasurer of the New Mexico State Chamber of Commerce, said.

"The people in the Chamber of Commerce come from the business management sector. They hire, train, and pay for the products of the educational system," Mr. Whitehill said. "They know an increasing number of young people will enter the job market at an unskilled entry level, and that many older workers will have to change their manner of work. Every Chamber of Commerce has a plank on education, urging businessmen to hire local young people. Chambers of Commerce bring together business firms and professional individuals in order to improve business and make the community a better place to live and work," he added.

The Chamber of Commerce in Gallup, New Mexico, where Mr. Whitehill resides, has been instrumental in bringing a 2-year branch of the University of New Mexico into the community.

"The university includes programs in nurses' training, paramedics, and related medical fields which are in demand in our area because of health problems among the Indians," Mr. Whitehill said.

He noted that next year's curriculum will include hotel and restaurant management, and that many jobs are available in this area due to a large number of tourists.

The labor community has always been involved in planning and implementing career education programs in Albuquerque, Mrs. Betty Mae Hartman, Chairman of the Education Committee of the Albuquerque Chamber of Commerce, said.

"We believe teachers should go out into the world of work and that workers should come into the classrooms," she said. "Many of our career clusters stress labor occupations and we are working on pre-apprenticeship programs in career education."

The Chamber of Commerce in Albuquerque is involved in career education in several ways, Mrs. Hartman explained. Its members have organized Operation Referral, a list of over 1,000 business and professional people and laborers who are willing to go into the classroom and talk to students about their field of work.

Over 4,500 students have been placed in part-time jobs in business and industry. This program has been very successful, Mrs. Hartman said.

"Students in work study programs do not replace workers or threaten their jobs. Students work only to explore careers and have controlled hours," she noted.

She told participants that in October 1976, the Albuquerque Chamber of Commerce and New Mexico Employment Security Commission cosponsored the second annual Career Information Fair.

"All high school students were invited to the presentations from businesses and industries from throughout New Mexico and neighboring States," she said.

Mr. Art Eiffert, Design Engineer from the Sandia Corporation in Albuquerque, explained the joint industry-education program in drafting which is in its first year of operation.

"This is a joint effort by the Career Enrichment Center of the Albuquerque Public Schools, Albuquerque Vocational Institute, and the Sandia Corporation," Mr. Eiffert said. "The program begins in the middle schools where students learn about drafting as a career choice; films, examples, and field trips are used. At the high school level, students are given the opportunity to participate in the work study program."

According to Mr. Eiffert, students spend time at their high schools taking academic courses such as English and Algebra and several hours in the Enrichment Center concentrating on drafting for two trimesters. During the third trimester, the students work and learn full-time at the Sandia Corporation.

"This program enables graduating students to enter the job market at a much higher level. We encourage students to take the necessary academic courses to bring them up to a high level of competence," Mr. Eiffert added.

Mrs. Carol A. Whitlock, Junior High Reading Specialist from the Sante Fe, New Mexico public schools, explained Project Intercept, in which teachers in the district go out into the world of work within the community.

The local Chamber of Commerce asked businesses in the community to let teachers observe for one half-day.

"Everyone was very enthusiastic because this program would enable them to better relate the world of work in their classrooms," Mrs. Whitlock said.

Teachers in the district were also enthusiastic about the career education workshop cosponsored by New Mexico Highlands University and the Las Vegas/San Miguel County Chamber of Commerce in their community in June 1976, she said.

The purpose of the workshop was to provide a forum through which representatives of business, industry, labor, government, and education could work together in the planning and implementation of career education programs in the local school districts.

The workshop included speakers from all of the representative areas, a large materials display, and a wilderness field trip focusing on the agriculture, forestry management, and conservation occupational areas, Mrs. Whitlock said.

Mr. Pete Gomez, Assistant Superintendent of Schools for the Espanola, New Mexico public schools, explained how a community advisory group works in his district to formulate objectives in various career education areas.

"We believe all programs should be approved by parents, so we involved a group of people to define needs, set priorities, and establish goals and functions of the program. The professional educators then facilitated the program," Mr. Gomez explained.

Mr. Gomez concluded his presentation by outlining the step-by-step procedure used to develop a Pueblo Agriculture System, defined as one of the top priorities of the career education program by the advisory committee.

Session 848
A Comprehensive Community Involvement Program

Newark Launches K-12 Career Education Program

In Newark, New Jersey, schools have created a multidimensional K-12 career education program. Ms. Geraldine Uzzel, Coordinator, Guidance Resource Center, Barringer High School in Newark, who chaired the discussion of the program, noted, "It's a challenge to work in an urban setting."

Newark received a Federal grant for its pilot program in 1972. The initial program was limited to one high school, one elementary school, and one mixed K-8 school. In 1973, with State funding, the program expanded to 11 high schools, two junior highs, and two mixed schools.

According to Ms. Uzzel, each of the different levels emphasizes the basics (self-awareness; relation of school work to the outside world; and basic skills of reading, writing, and arithmetic) to its student population.

Elementary school students receive their first exposure to career education with the aid of career explanatory billboards and role playing.

At the junior high level, the urban youngsters learn more about applying the "theory" they learn in the classroom to the real world. This is chiefly done in the area of technology.

Ms. Uzzel said that high school

students are given the opportunity to enter the job market—sometimes in paying positions and sometimes in nonpaying, voluntary capacities. In any case, a supervisor makes the rounds to speak with the students and their bosses, and find out what the students do well and not so well.

Also at the high schools, students receive detailed basic skills instructions and make use of career education bulletin boards and a job placement program.

Ms. Uzzel noted that a job directory was created by the Chamber of Commerce, but lack of funding has placed the booklet's future in limbo.

Session 851
Career Education Practices in Large Urban K-12 Settings

Students Hit the Streets in New York Career Education Program

"In order to sell anything, you have to believe in it; you have to have a product," stated Mr. Fredrick J. Koury, Director of the City As School Program in New York City. "We had to sell this concept. It was unheard of that you could externalize education for a large group of kids totally."

City As School is a New York City independent alternative high school with a primary curriculum objective of linking students with hundreds of learning experiences throughout the city. Beginning its sixth year, the underlying concept of City as School (CAS) is that the world of experience can be joined with the world of learning.

As Mr. Koury described it, "I knew nothing about external learning before I left John Dewey High School as an English chairman to become principal of this school. It wasn't even a school yet, just a program with Ford Foundation money."

The first task for the staff of the program was to convince employers to accept the internship concepts. (These employers would become the resource people of the school.) Secondly, goals and objectives for the programs had to be established.

"As teachers, we had to learn how to be determiners of objectives," he explained, "even though we may not have been proficient in certain fields."

Mr. Koury stressed the importance of complete externalization of students from the classroom, rather than the 25-45 percent achieved in other alternative schools.

"We were given a mandate to turn the city into a giant classroom. No one else could teach us. We did it with our own knowledge. Where we didn't have it, we created it," he said.

Creating resources in every subject area is extremely important to give the students the opportunity to obtain their high school diploma. Accreditation is the same for CAS as in any other city high school.

"The largest challenge," Mr. Koury noted, "has been our own family, the principals."

"We're now in the process of evaluating this program. With an enrollment of over 300 students, more than 85-90 percent of the kids have college as their immediate goal," he added.

Mr. Koury commented that the predominant interest of the staff lies in the resources of the community.

"There is a constant turnover of resources in and out of the program. For only 300 children, 1,200 to 1,600 resources are needed, because every 10 weeks the kids move from resource to resource," he explained.

The program is geared on a 10-week cycle, with the exception of college courses.

"It's a beautiful concept," he exclaimed. "It's replicable; you can do it wherever there is a good transportation system, in a small town, or a large city. The concept can be used in many ways, to help a bored senior or kids who have been turned off by formal education processes."

Mr. Koury said his only disappointment stems from his personal ideas dealing with the intellectual component that he feels is lacking in CAS.

"There isn't the time to intellectualize, to conceptualize, to pick an idea apart," he said.

He added that the students seem to miss the school facilities more than anything; however, he said he believes that it is dangerous in a decentralized school to try to recreate the familiar things, and the best of the old environment, thinking one can have the best of both worlds.

"Children choose the CAS because they gain their individuality, self-respect, and freedom, with the streets of New York as a learning ground. One of the things the kids learn is that life is a tradeoff; you give up something to gain something. Part of the maturing process begins at the ages of 15 and 16 in our school where life becomes a real choice-making situation. The choices are real and not isolated from experience," he concluded.

Session 852
Career Education Utilizing the City as a School

Section III

Connecticut Program Stresses Orientation to Work and Self-Awareness

The career education program in the Trask Elementary School in Plainville, Connecticut began as a pilot program in 1972, funded by State and Federal Title III monies. Following the writing, testing, and revision of goals and objectives, a curriculum guide was then developed which was disseminated to the other four elementary schools in Plainville. Teachers were requested to use the guide as a starting point for the program, but they were encouraged to expand on it with their own ideas and creative teaching techniques.

In kindergarten through grade six, emphasis is placed on an orientation to the world of work and self-awareness. During the awareness phase, a great deal of stress is placed on helping the individual child learn about him/herself, how he/she relates to others, and how his/her self-concept can be bettered.

Care is taken that all three domains of human behavior—cognitive, affective, and psychomotor—are developed simultaneously. For example, in the cognitive area, each grade level team chooses three or four of the 15 U.S. Office of Education clusters to incorporate career information into basic subject areas. In the affective domain, numerous multi-media, self-awareness kits that can be easily infused into the language arts program are used by teachers to develop understanding of self and others. Psychomotor activities that foster the development of manipulative skills are also stressed for all students.

Helping children to experience decision-making whenever possible, to understand and cope with rapid technological change, and to develop good work attitudes and respect for the dignity of all work and all people are also high-priority program goals.

Session 107
Career Education Practices: Early Primary Grades

Floridians Discuss Salable Skills, Community-Based Career Education, and Career Exploration

Representatives from Florida school systems discussed each of the six components of the comprehensive senior high career education model: career exploration through subject areas, alternatives for probable dropouts, alternatives for salable skills, resources, guidance and counseling, and placement and follow-up.

In the area of salable skills, discussion centered on the interrelationship of guidance and instruction which provides an opportunity for all students to leave high school with a minimum of one entry-level salable skill.

Alternatives for learning a salable skill are available through specialized experiences, leisure activities, and community service. For each salable skill, corresponding competencies have been identified and verified by an incumbent worker.

Presenters spoke about community-based career education, a derivative of national employer-based models, which allows students to explore various community sites in conjunction with instruction centered around values, employability skills, and other related topics. The installation of this program by participating Florida school districts is based on a program offering within a school rather than a center.

The career exploration through subject areas component highlighted a number of ideas for infusing career education concepts using teacher-developed curriculum materials. These ideas are currently used by teachers in the three districts comprising the consortium.

Mr. James R. Hollis, Coordinator, Special Needs, State Department of Education, Montgomery, Alabama, shows a slide-tape presentation on practical applications of career education in area vocational schools.

Session 110
Career Education Practices: Senior High

Alabama Model Makes Vocational Education Efficient and Effective

The Alabama State Department of Education has taken the position that "career education is a comprehensive educational approach to the preparation of the citizenry for living as fulfilled human beings in a predominantly technical, specialized society."

Further, in Alabama, vocational education is viewed as only one phase of guiding a student through the learning process of having a meaningful, satisfying life.

The area vocational high school system in Alabama provides for easy exit and reentry for students to explore areas of interest for career preparation in vocational education. Under this system, grades 7, 8, and 9 are devoted to the career exploration phase and grades 10, 11, and 12 emphasize the career preparation phase. Following a seventh grade, 1-year course in career exploration, students in eighth and ninth grade select two semester or one year-long course from subjects such as the world of manufacturing, agribusiness, home economics and related health occupations, and business education.

In grades 10-12, students select one or two courses from more advanced subjects such as basic retailing, welding, commercial sewing, basic agribusiness and trades, etc.

Session 111
Career Education Practices: Area Vocational High School

San Antonio Infuses Career Education Into English Curriculum

In San Antonio, Texas the idea to develop a plan for career education within the educational structure at Anson Jones Middle School emerged from personnel of the Northside Independent School District.

Following commitments and support by school administrators, data gathering, and formulation of program objectives, the concept was implemented within the English curriculum through research, theme writing, and reading.

Teachers sought materials from the school library and the Media Catalogue, reviewed career education objectives, and developed a detailed 6-week curriculum to be taught in the seventh grade English class. This included a 1-week interest survey; four weeks devoted to career awareness, career survey, and career investigation and exploration; and one week spent on career seminars and preparation and scheduling of "Career Day."

Community support was sought from military installations, private industry, businessmen, and parents. Letters were sent to these groups to explain the career awareness program and to invite their participation.

A curriculum to integrate career education into sixth and eighth grade English classes was written for the following year, and a program for the Northside Independent School District evolved from the Anson Jones Middle School career education program.

Session 112
The Secondary English Teacher in Career Education

APPS Model Provides Career Education in Public Service

The Georgia Applied Program of Public Service (APPS) project has as its goal the development of a model of a career education cluster in the public service area. It is designed to be transportable to either area or comprehensive high schools. Materials have been developed for grades 1-12 and include a community education component as the final experience for the high school student.

When complete, material from the program will include: classroom material for all grade levels, a set of individualized in-depth orientation packages for high school students, a set of individualized packages which teach competencies for all public service jobs, a community education component and implementation guide, and a formal evaluation of program materials.

Specific examples of student programs in the major occupational groups of public service include individual student programs in resources management, protective services, social services, regulatory agencies, and educational services. Each of these student programs is broken down into job families and specific job titles.

An evaluation of program product and process is also being conducted.

Session 116
Career Education Practices: Community Education Settings

Grossmont Program Highlights Career Guidance and Counseling

In La Mesa, California, the Grossmont Union High School District (GUHSD) has developed, implemented, and evaluated a series of activities in the area of career guidance and counseling.

The GUHSD master plan was derived from the California Model for Career Development which covers kindergarten to adult levels. The plan encompasses career planning and decision-making; education, work, and leisure activities; and life styles and personal satisfaction, as well as embodying sequential levels of awareness, self-internalization, action, evaluation, and revision.

The plan provides a broad framework and matrix of 112 student objectives related to goals which individual schools can select for local implementation. Objectives are chosen based on measured student needs in each high school.

Comprehensive testing programs and information systems provide information continuously to parents and students. Curriculum booklets on college admissions, financial aid, scholarship opportunities, and decision-making are also distributed.

Two 35-mm color filmstrips have also been produced to demonstrate all of the necessary steps involved in planning, development, organization, and operation of a junior or senior high school career center.

Session 117
The Secondary School Counselor in Career Education

Colorado Decentralizes State Resource Capabilities

The Colorado State Education Agency has organized its resources to maximize their impact on career education by contracting out career education services to regional or local agencies.

The Colorado State Facilitator Project, also affiliated with the National Dissemination Network, is a Statewide organization serving all 181 school districts in Colorado. State Facilitators are involved in disseminating and diffusing validated programs in all areas of interest, including career education. For example, a Career Education Resource Guide, developed for Statewide distribution, lists all of the nationally validated and Statewide programs related to career education as well as other State career education resources, including human resources.

Currently being studied is a system for the identification and utilization of community resources involving centralized scheduling. If implemented, the system would permit centralized interagency scheduling on a Statewide basis.

A State career education resource center has also been developed. This center includes materials from business and industry, as well as commercial and teacher-developed career education materials that are available on loan to every teacher in the State.

Session 121
State Education Agency Personnel in Career Education

Supervisors and Directors of Instruction Play Vital Role in Career Education

A presentation by Stow, Ohio representatives on the role of supervisors and directors of instruction in career education stressed that career education requires considerably more supervisory and administrative planning, direction, and coordination than other educational programs.

Initial emphasis should be on the pre-planning and support phase of the program, followed by a pre- and post-development needs assessment. The management plan that should be implemented by career education program directors must receive careful attention.

Thorough analysis of the suggested management strategy should include objectives, responsibilities, target group, timeliness, and outcomes for each program component. For example, the following areas should be considered.

1. Curriculum—integration of career education concepts, identification of units, unit development/revision/field testing, selection of strategies
2. In-service—approaches to implementation for teachers, counselors, administrators, board of education, parents, etc.
3. Students—type of objectives and evaluation approach
4. Career guidance—scope of program's emphasis, motivation of counselors
5. Management—planning, activity log, progress reports, meetings, workshops, budgets, proposals
6. Community—advisory committees, resource speakers, field trips, sites for observational experiences
7. Information dissemination—newsletters, newspaper articles, civic organizations, nearby school districts, State Department of Education.

Session 122
Supervisors and Directors of Instruction in Career Education

Maryland Career Education Program Highlights Systematic Management

In a session on The Systematic Management of Career Education Programs, presenters described Maryland's 5-year plan for career education, developed to carry out the State Board of Education's career education priority.

Major management objectives in the State's plan, as outlined below, were discussed.

1. In the area of program planning and needs assessment, the present status of career education in Maryland and the procedures used in assessing career needs and in updating the State career education plan were discussed. Special emphasis was placed on identifying unmet career needs of certain groups.
2. Staff development was discussed in terms of past and present in-service training and leadership training. Relationships between the State Department of Education and the State's higher education community were also described.
3. Presenters noted innovations in program and curriculum development that have taken place and used the area of foreign language as a model.
4. The kinds of resources used in the development of the television series "Calling Careers" and the television series on reading which emphasized career education objectives were described. Presenters also told participants about the Maryland career education resource notebook, which includes a variety of identified resource materials, program models, and human resources.
5. The career guidance objective was described within the context of two major activities: the development of a career guidance and placement manual for all counseling personnel in the State, and the implementation of a series of five 2- or 3-week career guidance institutes.
6. Evaluation of career education in Maryland was described in relation to the formative evaluation of all ongoing career education activities and the summative evaluation model currently being developed by the College Entrance Examination Board and a consortium of five States including Maryland.

Session 124
The Systematic Management of Career Education Programs

Staff Development Considered Essential for Career Education Success

New York State panelists told participants that staff development in career education must include several elements in order to be effective and comprehensive. Staff development program content should be based on development of the career education concept; a profile of the marketplace, including economic and employment data; establishment of career education objectives; curriculum infusion; and strategies for utilizing community resources.

Six major components were cited as a starting point for developing a successful career education program:

1. Knowledgeable leadership
2. Clearly stated program objectives
3. Acceptance of concept and commitment by local Board of Education
4. Systematic involvement of school and community resources
5. Total system involvement
6. Ongoing evaluation system

Session 125
Staff Development Practices and Programs in Career Education

From left, Ms. Candee Mann, Program Coordinator, Career Guidance Center, Patchogue, N.Y.; Mr. Donald Stanistreet, Director, Career Education Program, Syracuse City School District, Syracuse, N.Y.; and Dr. Vito R. Pace, Professor, State University College at Buffalo, N.Y., listen intently during a session on Staff Development Practices and Programs in Career Education.

Community Becomes Learning Laboratory Through Business-Education Cooperation

Representatives of education and industry from New York say that, through the cooperation of schools, colleges, small businesses, and industry, the community can become a learning laboratory for students.

Internships, field experiences, and work-study programs developed in cooperation with small businesses can assist students in career preparation and widen their horizons and options, while at the same time involving the participation and support of practitioners and professionals from the world of work.

Field trips and meetings with top executives of small businesses, especially for in-service training, can provide career education information for teachers in all disciplines so that the concept can be infused into all courses at the primary and secondary levels.

Discussion of individually owned and operated small businesses with relevance to career education could involve agriculture, production, distribution, services, and creativity.

Through business-education collaboration, students are granted the opportunity to view the application of theory firsthand as well as widening career horizons. Since the community also gains better understanding of a particular company through career education information, this often serves as a productive recruiting measure for business as well.

Session 126
Small Business in Career Education

Portland Project Addresses Needs of Minority Students

In Portland, Oregon, the Grant High School Career Education Project for Minority Students is focusing on the career education needs of minority students.

Issues addressed by the project include enrollment of minorities in career programs, basic skills, school dropout rates, involvement of minorities in affirmative action programs, unemployment rates, and assistance to educational institutions in establishing programs to meet these students' needs.

Funded by the Disadvantaged and Handicapped Provisions of the Federal Vocational Education Act and monitored by that portion of the Oregon State Department of Education and the Portland Public Schools, the project is intended to (1) provide the procedures/strategies/activities by which a significant number of minority and other educationally disadvantaged young people will enroll in State-approved vocational education clusters leading to potentially enduring and upwardly mobile careers, and (2) develop documentation on this model for dissemination to other educational institutions desiring to establish similar programs.

To date, project effects appear to include a more positive attitude toward the school by adult minority group members; improvements in students' school attitude, attendance and discipline patterns, and class achievement; a lower dropout rate; greater enrollment in pre-vocational and vocational education classes; and increased success with school counseling sessions.

Session 132
Career Education: Black Americans

Ritchie County Builds Rural Career Education Model

Ritchie County, West Virginia has participated for the past three years in a Regional Exemplary Career Education Project for students in kindergarten through grade 12.

Funded through the West Virginia State Department of Education, Bureau of Vocational, Technical, and Adult Education, the project serves a rural area in west-central West Virginia.

Career awareness is stressed in grades K-4, followed by development of attitudes regarding self-awareness and the world of work in grades 5-8.

In ninth and tenth grade, students may participate in a career exploration class dealing with business, service, environmental, and industrial occupations. This class is conducted in a nearby vocational/pre-vocational technical career center. A career development and resource center, focusing on students' abilities, values, and interests, and providing information on job interviews, job characteristics, goal-setting, decision-making, and other areas is also part of the program.

Students in grades 11 and 12 are offered the opportunity for independent studies and work experiences for further career decision refinements.

Internal programmatic evaluation is conducted by staff involved in the project.

Session 133
Career Education Practices in Rural K-12 Settings

Field Trips Add Spark to Career Education

In Dallas, Texas and Los Angeles, California, field trips have a new name. They are called career journeys, based on the idea that they can offer motivation and diversity for new career horizons for students and an updated view of the community for the teacher.

In Dallas, grade 7-12 teachers and career counselors have complete tour information in most curriculum areas for specifics in planning career journeys to some 235 businesses, industries, factories, and other institutions cooperating with the schools to assist in exposing students to old, new, and emerging career fields.

A community resource handbook has been developed in Dallas to assist career education and instructional programs through field trips. Based on the results of questionnaires sent to teachers, field trip coordinators, and counselors in the Dallas Independent School District, the handbook can be easily updated as needed.

Inexpensive instructional aids for field trips and preparatory kits for use prior to career journeys in introducing K-12 students to the community classroom have also been prepared.

Session 137
Career Education and the Field Trip (Grades 7-12)

Teacher-Made Materials Make Classroom Come Alive

Elementary school classrooms in Pittsburg, Kansas are pleasant places, due in part to the development of materials by teachers themselves to supplement or enrich their ongoing curriculum.

Materials demonstrated at the conference focused on several areas of career education, including self, work, leisure, and resources. Each material provides additional practice in some academic area.

Examples of some materials used include the following:

1. Three potato chip cans can be covered with paper and labeled, "This is me," "I wish this were me," and "This isn't me." Children then draw slips of paper from envelopes with terms on them such as "skinny," "strong," "want to be an astronaut," "nice," etc. Each child fills the three cans according to the way he or she feels and then writes down the choices made for each category. This not only helps students gain self-awareness but assists teachers in determining students' self-concept.
2. Pizza wheels divided into eight parts can also be used. In one such exercise, snap clothespins with a tool appropriate to a given occupation are matched with one of eight workers' job titles on the wheel. In another exercise, long and short vowel sounds are matched to the names of eight occupations, such as "sailor" and "astronaut."
3. Card games and study trips are also used to emphasize parts of the curriculum. For example, teachers can develop trip guides prior to a study trip to visit a newspaper or other business, and teachers and students can work together to develop interview sheets for use on such trips.

Session 140
Teacher-Made Career Education Materials

EBCE Shows Students What to Expect From Working World

The Washington Township High School in Sewell, New Jersey was funded as an Experience-Based Career Education (EBCE) pilot school in early 1976.

In this program, students visit community businesses one day per week to experience the community as an extension of the classroom.

The student begins by submitting a projection as to what he/she expects to see and learn at a particular business site. Following the visit to the site, each student submits a report comparing expectations with actual experiences and explaining why there were similarities and differences. Students must also explain why they would or would not choose such a job. They are asked to view themselves as the employer, explaining what his/her job is like and describing his/her goals, reasons for success, duties as an employee, and frustrations. Oral follow-up discussion with classmates is also held.

Throughout the weeks that the students are in the business community, they attend a group counseling session one period per week to develop decision-making skills and help them identify with general and specific career expectations and responsibilities.

Any student in grades 10-12 may enter the EBCE program through communications (English) courses or a social studies course. Plans call for integrating EBCE activities into other subjects such as math, reading and psychology/sociology.

Session 141
Experience-Based Career Education

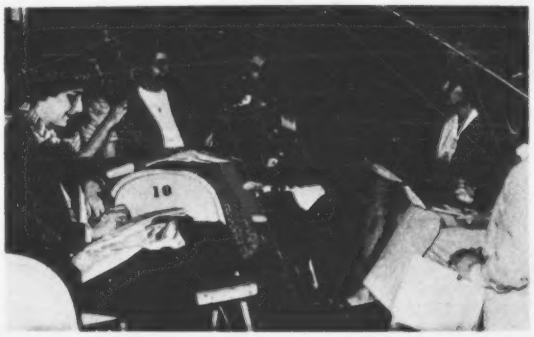
St. Louis Educators Plan Meaningful Field Trips

Educators in St. Louis, Missouri have devised a thorough plan to correlate field trips with material taught in the classroom to facilitate career education.

Some of the steps involved in planning and implementing a successful trip include the following:

1. Select an appropriate site to correlate the trip with subject areas being taught in the classroom
2. Contact the site to make arrangements for the trip at least two weeks in advance. Confirm a date and time for the trip and obtain necessary information on activities to be observed, person to whom the group should report, background information, etc.
3. Arrange for transportation to the site
4. Secure permission for the trip from appropriate school system officials and parents
5. Prepare for the trip in the classroom; note objectives of the trip and how they correspond to material being studied
6. Secure information (books, pamphlets, audio-visual aids, etc.) on the types of occupations to be viewed
7. Discuss jobs available at the site and activities and employees to be seen on the trip
8. Make a list of questions students would like to have answered at the site
9. Discuss safety precautions and desirable behavior for the trip
10. Following the trip, discuss the type of business and employees observed, whether a service or product resulted, worker dependencies, training required for employees, special equipment or tools used, any jobs of particular interest to students, etc. Send thank-you letters to people responsible for the trip, and write stories about the people observed on the trip.

Session 147
Career Education and the Field Trip (Grades K-6)



In a session on Career Education and the Field Trip (Grades K-6), after a total group role play of a field trip, participants split into groups to discuss with the St. Louis public schools career education staff how to improve a world of work trip.

Maine Program Uses Sequential Career Development Design

South Portland, Maine is a small city utilizing a "Sequential Career Development Design." Separate goals are established for primary grades, intermediate grades, junior high (grades 7-9), and senior high (grades 10-12) in the areas of self-awareness, interpersonal skills, decision-making, work awareness, manipulative skills, economic awareness, the value of work, and relevance of education.

Career education awareness components are infused into the elementary curriculum with particular attention to process rather than products.

The process in secondary curriculum development emphasizes the needs of the noncollege-bound student in mathematics, English, and social studies.

The secondary guidance department has been restructured to meet more effectively the career planning and decision-making needs of the students. This includes the establishment of career resource centers and a job placement component as well as an increase in group work and a partnership with classroom teachers in delivering career education to the student.

Career Guidance Institutes (sponsored by the National Alliance of Businessmen) are also used as an in-service training technique for all professional teaching personnel.

Session 149
Career Education Practices: Small City Settings

Michigan Model Helps Students Apply Learning to Their Lives

The Michigan Model for Career Education provides a foundation for career education practices in all Michigan schools. In Bay City, career education is given the subtitle of "education for living" and includes a variety of components.

In a vocational center in the school district for children in upper elementary grades, children select two occupational areas within the skill center which interest them, and the center's students plan and provide educational and occupational experiences for them.

At the junior and senior high level, one total districtwide program involved student participation in a 1-week, health-related career exploration program. Michigan has been developing model exploration units of study which have required community input in their development and delivery.

All of Michigan's teachers have access to newly developed program materials, including career development goals and performance indicators and a notebook of activities in career development for teachers and counselors in every grade and subject area.

The Bay City school district has a career education coordinator, a steering committee, a larger task force, and a citizens' advisory committee. Goals and objectives for each are developed in relation to the district philosophy.

Session 150
Career Education Practices: Large Urban K-12 Settings

Wayne Project Emphasizes Management Practices

The importance of management practices is emphasized by New Jersey's Wayne Board of Education in its Wayne Design for Career Education. Operating in a suburban setting in a local school district of 11,000 students, the program involves (1) use of at least five different occupational cluster programs developed through previous local, State, and/or Federal research and development efforts as well as (2) articulation with occupational programs in feeder schools.

As a framework for implementing clusters, the Wayne Design includes the following steps:

1. Determine the level of implementation (awareness, exploration, etc.) and grade level
2. Define the cluster and enumerate job opportunities and expectations, personal qualifications, and core competencies
3. Identify resources
4. Determine the extent of implementation (e.g., number of teachers and students, number and designation of disciplines)
5. Set goals for each level of implementation
6. Assess available opportunities and needs of the system
7. Gain personnel involvement
8. Ensure that students have access to courses and an opportunity to develop competencies needed for the appropriate level
9. Provide support services, monitor, and evaluate.

Session 151
Career Education Practices: Suburban Settings

ABC/EE Views Education as Different From Skill Acquisition

The developers of ABC/EE (Activity-Based Curriculum for Elementary Education) view education as being different from skill acquisition.

Based on the idea that each child engaged in elementary education activities is gaining skills and developing attitudes which will affect his/her lifestyle at the close of his/her educational commitment, the ABC/EE program strives to provide manipulative activities that enhance the elementary academic skills in different areas.

Under this plan (currently in effect at the Vocational Technical Center in Wichita, Kansas), each student, regardless of sex, race, ability, or age, receives an interdisciplinary, psychomotor, manipulative experience which enhances cognitive concepts.

According to program developers, ABC/EE provides curriculum interrelationships, a structure to facilitate both the teaching and learning process, use of industrial technology and home economics as a tool for instruction as well as a content base, and integration into any unit of instruction.

Industrial technology concepts used in ABC/EE include: (1) knowledge of the techniques by which man has created his world, (2) what man knows about and does with materials, (3) the environment man has created, (4) man's ability to change his environment, and (5) replacement of "muscle power" with machines and energy.

ABC/EE home economics concepts include a people-oriented discipline, self-discovery, individual maturation, management of human and material resources, and a study of peoples' basic needs such as food, shelter, and clothing.

Session 208
Career Education Practices: Upper Primary Grades

Michigan Presenters Discuss Projects CERT and MAP

This presentation focused on the middle/junior high school and offered an opportunity to preview materials, simulate exploration experiences, and develop a conceptual model for career education.

Materials, activities, and information were shared regarding Project CERT (Career Exploration and Related Training), a program using secondary area vocational (skill) centers in the exploration processes for junior high students, and Project MAP (Madison Awareness Project), a junior high career exploration project of the Pontiac, Michigan Public Schools.

Also described was the Michigan Career Exploration Project, as used by the Wayne County Intermediate School District and Bay-Arenac Intermediate School District. A State conceptual model for, and sample material related to, middle/junior high school career exploration was also presented.

Session 209
Career Education Practices: Middle/Junior High School

Project GIVE Provides Career Education in Maine High Schools

Project GIVE (Guidance in Vocations and Education), Cumberland, Maine, is a K-12 career education program which has experienced success at the high school level of the program.

A major component of the project is the group guidance program at each grade level. Freshmen experience a week-long orientation through English courses which emphasize problem solving, role playing, reporting, and discussion techniques. Sophomores experience vocational exploration groups which deal with decision-making and setting goals through the sophomore English classes. Juniors meet in volunteer groups for about five hours and deal with assessment of interests and abilities, values clarification, and group process and coping skills. The seniors have a series of programs of information concerning placement after graduation. These programs involve college admissions counselors, financial aid, employment counselors, business representatives, etc.

Other components of the Maine program include shadowing programs and infusion of career education concepts into the curriculum.

Presenters noted that mini-field trips are also used to enable small groups of students to visit resource sites in which they are interested. Each student has assigned tasks that include interviewing various workers, learning about the work environment, discussing the future market in related fields, etc. Students prepare reports which are presented to the rest of the students on each mini-field trip.

Session 210
Career Education Practices: High School

Kansas Initiates Project EXPLORE

The Central Kansas Career Development Program EXPLORE was initiated to focus on career development education in selected junior high/middle school sites of the central Kansas area.

The goals of the program are for students to: (1) become aware of themselves and the world of work and thereby make life career decisions as their environment changes and adjustments are necessary, and (2) relate basic education curriculum into life career development.

The two organizational plans devised (the Career Materials Center Approach and the Departmental Approach to Career Education) both adapted well, in the eyes of program developers, to the existing junior high/middle school curricula in the 21 sites established for field testing.

Project Discovery hands-on career exploration individualized packages were implemented with emphasis on developing pre- and post-package self-awareness experiences. These career education activities were compiled in the EXPLORE Program Leader's Guide, which contains 182 career exploration activities in the areas of exploring self, exploring career clusters, and games and other "fun" career activities.

Session 213
Logic and Practice of Special Courses in Career Education

Role of Elementary Counselor Dependent on Career Guidance Objectives

In a presentation on the role of the elementary counselor in career education, the importance of the following career guidance objectives for elementary students was stressed: (1) to promote an awareness of self and the relationship of self to the world around the elementary student, (2) to provide for realistic awareness of the world of work and leisure, (3) to assist in the development of decision-making skills, (4) to facilitate the introduction of positive values and attitudes toward work, and (5) to develop an understanding of human relations.

Suggested career guidance activities provided by elementary counselors include individual and small-group counseling, orientation to work and leisure, coordination of home and community resources, and consultation for staff in the area of self-awareness, group process, and human relations.

As an active participant in the school's career education efforts, the counselor may also assume the roles of resource person and consultant regarding materials identification, evaluation, and usage; community resources; small-group and whole-class work with children; home and family relationships; and individual counseling for children.

Activities discussed included the development of a staff resource file, sex role stereotyping, and work values.

Session 216
The Elementary Counselor in Career Education

Montana Offers 'The Next Step'

In 1970, the Helena, Montana school system initiated a career education program entitled "The Next Step," designed to broaden the occupational horizons of students, identify dropouts, provide new opportunities for work experience, create "bridges" between earning and learning, improve the status and scope of vocational education, and involve the schools and community in a cooperative effort.

The program initially surveyed teachers, administrators, school board members, community individuals, and students at grades three, five, eight, and twelve. Results indicated that priority should be given to in-service training of school faculties and the development of career-oriented curricular units.

Following a series of in-service sessions to orient elementary teachers to career education, a library of career-oriented units was established for integration into the existing curriculum. These units were built around the following components of career awareness: subject matter tie-ins, manipulative activities, resource people, role playing, field trips, and occupational awareness.

A steering committee was established and guidelines for career education (K-12) were published and presented to all district staff.

At the secondary level, career education was given special emphasis by English/social studies teachers through career-related activities and projects.

Continuing emphasis is being directed at the in-service training of teachers and the "visibility" of career education in the schools. The district is planning the establishment of middle schools, and faculties of both middle school buildings have recommended a career exploration component.

Session 218
Career Education in Large Urban Settings (Grades K-12)

Impact of Industrial Revolution Felt in Rhode Island

In West Warwick and East Providence, Rhode Island, the importance of the industrial revolution to Rhode Island in particular and the U.S. in general, as well as the evolution and "spin-off" of other related businesses and industries is being studied.

In the Greater Providence Area schools' career awareness programs, a film on "Industry and Your Future" shows young people past, present, and probable future developments of industry and its role in providing "the economic life-blood" of a community. Representatives from industry are present at the film's showings to answer students' questions.

Luncheons providing an opportunity for students to discuss various occupations available at industrial firms are also held.

Plant tours of manufacturing companies and career day programs, in which representatives from industry visit the schools for informal discussions with students about careers, are also part of the Rhode Island program.

Session 219
Career Education for Young Adults

Positive Attitudes Seen as Crucial for Successful Career Education Programs

Representatives from Michigan emphasized the need for developing positive attitudes toward the concepts of career education by everyone involved in program design or implementation.

Following a review of the Michigan plan for implementing career education and a description of initial efforts to launch a career education program in one intermediate school district, the following points were made regarding "selling" career education programs:

1. Staff must completely agree on the basic definition, philosophy, and concepts of career education.
2. A local needs assessment must be completed.
3. Broad goals and objectives should be delineated.
4. An effective communication system within the school building(s) should be designed.
5. The most effective process of infusing career education into the regular curriculum should be discussed and established.
6. A continuous evaluation process should be designed.
7. A time schedule should be developed for program implementation.

Session 222
The Secondary Principal in Career Education

Career Education Coordinators Play Important Role

The role of career education coordinators in providing support to career education programs in various geographic locales was discussed by panelists from Illinois.

Services provided by coordinators in urban locations such as the Illinois Career Education Service Center (CESC) Urban Site include staff development, information dissemination, and coordination of a resource center. For example, the CESC Urban Site coordinators assist with staff development through workshops, college courses, consulting services, and conferences on career education. Information about career education and related activities is disseminated through a bimonthly newsletter, presentations, publicity releases, and informational packets. A career education resource center is also available as part of the external support system provided by coordinators to local school districts.

The Career Education Service Center Rural Site provides different challenges for the coordinator due to more limited resources and the desire of local communities and schools to retain independence. Here, coordinators work closely with individual educators in infusing career education into the classroom, and in-service activities are provided to educators other than teachers in an effort to sell the career education concept as an approach to making learning relevant. Consulting services are also provided in assisting school district personnel understand and implement career education.

Session 225
The Role of the Career Education Coordinator

Industry and Education Cooperate to Develop Media and Materials

The Western Maryland Career Education Project includes a business-industry component featuring regionally produced media. These media include filmstrips on individual industries and films on career clusters such as manufacturing, hospitality and recreation, health, and transportation. The ATS-6 Satellite Educational Project in Appalachian Maryland was also developed cooperatively by industry and education, and its audio-video communication system is also used in the in-service program for teachers in career education.

Also discussed in this presentation was the "adopt-a-school" program, a continuing effort of the McCormick Company and the Baltimore City School System. The program has been operating for several years and has been implemented by other areas of Maryland and other States.

In addition, apprenticeship programs and careers in the construction industry were discussed.

Session 229
Large Business and Industry in Career Education

South Dakota First Graders Track Down 'Roly Poly Cookies'

In Parkston, South Dakota, a first grade teacher has developed a field trip entitled "The Roly Poly Cookies," designed to introduce the concept of work to first graders, to introduce school and community workers, to illustrate the importance of many types of work, and to develop pride in jobs that parents and other family members hold.

The unit begins when the teacher reads to students the story of the "Roly Poly Cookies" or substitutes the words "roly poly cookies" for "gingerbreadman" in the story "The Gingerbreadman." Following this, students help make cookie dough, take the cookies to the school cook for baking, and tell the cook to watch the cookies closely so they won't get away. The cook may describe his/her job to the students and the teacher can then take the students on a tour of the school to discuss jobs held by the principal, secretary, teachers, counselors, janitors, aides, etc.

After these discussions, students and teacher return to the kitchen, only to find that the cookies have jumped out of the oven and run away! However, a note from the cookies to the class is prominently displayed, telling the students where to look next for the cookies. The cookies are sent to many businesses or job sites within the community; at each successive job site, the personnel tell the students about their jobs and the students then find another note regarding the next place to look for the cookies. The last note, left on the teacher's desk, tells the students the cookies are in the park, and the students finally find the cookies and some milk.

Another form of field trip used in Huron, South Dakota involves a visit to the supermarket. In this unit, second graders are introduced to occupations in a supermarket, obtain some hands-on experience in career possibilities associated with the supermarket, and learn about the different weights and measures of products using the English system and metric system.

In Huron, the career education committee has assigned specific job clusters to each grade level according to subject matter already being taught. Career education field trips must be taken from the job clusters assigned to a given grade level to prevent repetition of field trips among grade levels.

Session 239
Career Education and the Field Trip (Grades K-6)

Resource Centers Assist in Implementing Career Education Programs

Career education resource centers provide programs and materials which educators can use to implement career education programs in their school settings. Generally, such resource centers provide materials and media which will assist students in making choices concerning occupations, education, and lifestyles.

A representative from a Lansing, Michigan high school discussed the necessity of careful planning for such centers, including needs assessment, cost analysis, inventory of school facilities, and negotiations with the administration and other personnel. At this school each student receives a Student Career Kit upon entering high school. This consists of a folder outlining materials and activities that can be performed in conjunction with the career resource center. If a student utilizes all activities outlined, he/she can accumulate up to 100 hours of career activities.

The Royal Oak, Michigan Vocational Educational Center has also developed a career education resource guide to assist teachers and counselors in identifying quality resources for use in resource centers. Methods of identifying, acquiring, and evaluating appropriate resources were discussed.

Session 240
The Career Education Resource Center (Grades K-12)

Mr. Lee Catoe, Community Relations Specialist, Columbia Chamber of Commerce, Columbia, South Carolina, facilitates discussion in a session on The Chamber of Commerce in Career Education.

Newspaper Used as Living Text Within the Classroom

A media consultant and counselor from the University of Missouri, Columbia, Missouri, told participants that it is essential for students to learn to read the newspaper effectively and that one way to accomplish this is through a newspaper-in-the-classroom program.

When the newspaper is used as a "living text" within the classroom, it is important that a readiness period be planned to introduce students to the intent, content, terminology, and format of the newspaper.

As a resource for career education, the various sections of newspapers offer many possibilities for personalizing learning according to student interests. News stories offer insights on people. Letters-to-the-editor provide natural lead-ins to discussion of individual beliefs. The comics offer opportunities to study human nature and point out the importance of humor in our lives. The lifestyle or people section stresses nonwork-related aspects of people's lives. The sports section discusses leisure activities. The advertisements teach consumer information, and the help wanted section incorporates opportunities for studying the world of work and work patterns. Many other uses for the newspaper as a teaching tool can emerge after its use has begun.

Session 241
Career Education Practices Using the Newspaper

AAIP Recruits More American Indians

The Association of American Indian Physicians, Inc. (AAIP) has launched a major recruitment program to bring many more American Indians into the health professions.

According to the AAIP, some of the problems, including cultural and value barriers, that prevent American Indians from entering health professions such as medicine, osteopathy, dentistry, optometry, etc., include: lack of adequate preparation for college, insufficient knowledge or experience to view health professions as realistic careers, too few role models to foster interest in these professions, inadequate financial and personal support systems, and cultural conflicts (e.g., dissecting cadavers violates cultural custom of refraining from even looking at anything dead).

Noting that counseling and personal support systems are very much needed, the AAIP recommends that: (1) educational resources at all levels serving the American Indian be expanded; (2) preparatory assistance programs for American Indians be established in math, biological and physical sciences, and study skills; (3) the needs of American Indians for financial support for higher education be made known; (4) personal, one-to-one counseling be a component of all educational institutions enrolling American Indians; and (5) institutions recognize the different cultural backgrounds of students and personalize attitudes toward them.

The AAIP has developed a recruitment film (shown at the conference) for American Indian students interested in pursuing a health career or health profession.

Session 243
Values Clarification Techniques in Career Education

CAPS Assists With Placement Services

Career Assistance and Placement Services (CAPS) is a model project conducted at Triton College, River Grove, Illinois, under grants from the Illinois Office of Education/ Adult, Vocational, and Technical Education.

This model, which assigns a high priority to career assistance aspects of a placement program, includes the following components: planning and development, coordination, career development services, placement services, and follow-up/ evaluation.

As part of the field test conducted in five school districts throughout the State, the following objectives have been established for career development services at Triton College and Joliet Township High Schools: (1) to provide pre-employment preparation to assist students to seek, obtain, and retain employment; (2) to supplement efforts of the career guidance staff in assisting students to define career goals; and (3) to provide resource services to students and faculty on requirements of career opportunities and the changing nature of the occupational world.

At Triton College, employer members of a placement services advisory committee have prepared booklets regarding obtaining jobs, provided panel members for student/employer job clinics, and restructured recruiting events to a series of career days aimed at disseminating information about job opportunities in various fields.

Joliet Township High Schools provide career resource centers with information and personal assistance in all aspects of career planning. A computerized guidance information system is also available which includes detailed data on local employers and potential job opportunities.

Session 245
Job Acquisition and Retention Skills Programs

Brattleboro Program Holds Career Opportunity Days

In 1970 the Brattleboro, Vermont Chamber of Commerce Education Committee and Brattleboro Union High School jointly launched what has become a successful occupational "shadowing" program called Career Opportunity Days.

The program provides students with brief exposure to the types of experiences encountered during the "average" day in the life of a person employed in a given occupation. Each student spends two full days with someone in an occupation in which the student has expressed an interest. During this time, the student follows the same timetable, dresses similarly, and performs similar duties to those of the person being shadowed.

According to program developers, observable results of the program have been that some students are making course changes, completely reversing certain career interests, forming new friendships with professional people, and discovering what their parents actually do when they leave home for work each day.

Session 246
Shadow Programs in Career Education

Wisconsin Consortium Designs Replicable Needs Assessment Instruments

The Wisconsin Career Education Consortium recognizes the importance of initial and continuous needs assessment in developing career education strategies. The Consortium has pooled the resources of seven school districts to construct assessment and evaluation instruments which can be used both by member school districts and by other districts. In the developmental process, organized procedures were followed for obtaining feedback from all Consortium districts on all instrument drafts. A number of instruments developed simultaneously yield needs assessment data and collect data for other evaluation purposes.

To determine the types of data needed, the Consortium identified and analyzed the program development process and the decisions involved in it.

Consortium members believe that effective use of data depends on the application of appropriate data processing techniques so that effective data analysis and summarization can take place. They note that care must be taken to develop computer printouts with varied levels of aggregation suitable to the scope and nature of decisions to be made.

Session 250
Needs Assessment Procedures in Career Education

Texas Career Education Course Correlates Vocational and Academic Teaching

In 1975 the Department of Education at Stephen F. Austin State University challenged a group of teachers from the Lufkin Independent Schools in Lufkin, Texas to design a career education course that would be beneficial to all educators in all teaching fields.

Initial investigation by the teaching team determined that a gap between vocational and academic studies did exist and that a teaching partnership approach might be most effective in attacking the problem. These teachers believed that many of today's alienated students are "turned off" by the failure of schools to relate formal studies to the requirements of the world beyond the campus.

In an attempt to correct the problem a subteam of academic and vocational teachers were invited to participate in instruction of students emphasizing the importance of academic abilities in vocational fields and the equal importance of vocational considerations in formal academic settings. Both vocational and academic teachers were to relate to students the importance of the application of knowledge in everyday life and livelihood.

Presenters at this session said that to date the project has been very successful. Teachers, students, and administrators have seen the value of establishing a correlation between the previously separate disciplines.

Presenters demonstrated techniques used to encourage teachers from all teaching fields to participate in such an endeavor and discussed its potential benefits to students, teachers, and industry.

They noted that there appear to be four methods by which the LISD-SFASU vocational fusion model can be disseminated: (1) 1-hour or longer presentation by the team as a whole or only members of the team; (2) a 1- or 2-day in-service workshop for one or more school systems; (3) a college accredited field project for teachers within a school system; and (4) a course offered on the college level.

Session 310
Career Education Practices: Interdisciplinary High School

Iowa Plan Improves Industrial Arts Curriculum

As a result of collaborative efforts between the Executive Board of the Iowa Industrial Education Association and the Iowa State Committee on Industrial Arts Teacher Education, a new State curriculum guide for industrial arts has been developed.

The guide is based on several fundamental premises: (1) that industrial arts should draw its content from industrial technology, and (2) that while industry consists of many subsystems, its dominant systems are communications, production, and energy.

Two general goals were recognized as appropriate for the entire K-12 industrial arts program: (1) career–awareness and exploration of aptitudes and interests in terms of potential for future careers, and (2) industrial - technological–development of knowledge, skills, and attitudes relating to industry and its supporting technologies.

At the elementary level, the learning experiences in communication, production, and energy systems are usually correlated with other subject areas. At the junior high level, courses are designed to help the student explore four specific clusters (namely, graphic communications, manufacturing, construction, and energy and power) within the basic systems. At the senior high level, courses pertaining to particular industrial technologies are recommended.

A major portion of the guide is devoted to selected student competencies and sample learning activities for each of the program offerings. The guide also contains descriptions of selected instructional methods, approaches, and resources.

Session 311
The Industrial Arts Teacher in Career Education

Massachusetts Surveys Work Experience Programs

In Massachusetts, results of surveys sent to all schools with ninth to twelfth grades and surveys of employers indicate that over 87,000 students are currently being served by high school work experience programs. Students are usually placed at sites in their local community. The private sector provides the majority of placements.

Some examples of findings from the various surveys used were as follows:

1. Few employers offered formal training programs; instead, students were integrated as part of the regular part-time staff.
2. Employers unanimously felt they had excellent rapport with school personnel.
3. The most frequent reason given for not hiring more students was the insufficient number of supervisory personnel.
4. In most cases, college-bound students participated in nonpaid internship or career exploration programs, while noncollege-bound students generally participated in cooperative extension and work study programs.
5. Most students felt they had good relations with school work experience supervisors.
6. Most students realized that further work and education in a field would be necessary before they had "learned a trade."
7. In general, the intent of participation in work study programs seemed to be financial and/or dropout prevention.
8. Most program coordinators were responsible for between 25 and 30 students. Students were usually visited on-site once every three weeks. In some cases, program coordinators had teaching responsibility, while at other schools coordinators served only as placement specialists and guidance counselors.
9. The need for evaluation systems was evident and seemed particularly important in regard to the granting of academic credit.
10. The need for a certifiable training program to establish uniformity, set standards, and ensure quality control was also evident.
11. Half-day alternation with mornings spent at school and afternoons at work was the major pattern used in comprehensive schools, while vocational schools favored a system of weekly rotation between school and work site.
12. Coordinators expressed the need for help in the following areas: union participation, internship programs for prospective work education coordinators, cost-benefit analysis, establishment of career awareness programs in lower grades, definition of the nature of work experience programs yielding the highest payoff, survey of available training stations, and techniques to assess the "state of readiness" of students to engage in work experience programs.

Session 312
The Work Experience Teacher in Career Education

Business Teachers Contribute to Development of Career Concepts

Business educators told participants that the business teacher can contribute to the development of career concepts in grades K-12, although most business teachers concentrate on the secondary level. Generally, exploratory career programs in ninth grade lead into a study of the American free enterprise system in tenth grade, business simulations in eleventh grade, and experimental programs in twelfth grade.

Student youth organizations, such as the Future Business Leaders of America, can be used to promote further awareness of the free enterprise system.

Recently the Future Business Leaders of America has launched a 3-year project, Project Awareness, in which FBLA members will devote themselves to active development of an understanding of the free enterprise system. This will involve school and community projects on such subjects as employment, profits, responsibility, productivity, freedom of choice, etc. These projects can involve all segments of both the school and community.

Session 313
The Business/Office Education Teacher in Career Education

Eau Claire Project Displays Career Education Materials

Some of the major materials produced jointly by the District One Technical Institute, Eau Claire, Wisconsin, and the Eau Claire public school district were displayed and discussed during this session.

Using the Wisconsin State Guide to Career Education, the District One Technical Institute produced a "Guide to Career Education" which contains materials, suggestions, and examples by which the 16 concepts of career education, as used in the original Wisconsin guide, are and can be integrated into curriculum materials.

A careers directory and a referral agency brochure on area resources were also discussed, as were other materials produced during three joint summer workshops held during the 1972-74 career education project period.

The District One statement on articulation, established following the termination of the federally funded career education project, was also discussed as well as other accomplishments such as a competency-based curriculum in the machine tool area and a joint workshop in communication skills.

Another handout discussed in detail was the Articulation Cycle, which shows key words such as understanding, cooperation, coordination, and communication as necessary components to effect and continue career education or articulation between participating agencies, institutions, and educational levels.

Session 314
Career Education Practices: Post-Secondary Area Technical/ Vocational Schools

Rochester Community College Engineering Programs Prepare for Careers

Civil engineering technology, electronics engineering technology, and mechanical engineering technology are three programs offered at Rochester Community College, Rochester, Minnesota, which emphasize the importance of a foundation in mathematics, physics, and basic methods of communicating. The programs stress the point that this foundation is necessary not only for students to learn the particular technical discipline involved but also for them to function in industry as engineering technicians.

Each program receives input from its local advisory committee with regard to proper course content and sequencing, proper selection of equipment, employment possibilities, and the general "state-of-the-art."

The College Placement Office assists graduating students with securing entry-level positions in industry. Graduates are encouraged to sign up for "practice interviews" with the Placement Director. Both the Placement Director and the graduate's College Advisor assist with preparation of resumes. The Program Advisor for each technology program then assists the placement office in scheduling interviews.

College staff also provide graduates with information about 4-year degree programs in technology when students desire to transfer to institutions offering a Bachelor of Science degree.

Session 315
Career Education Practices: Community College

Planning Course Assists Adults Undergoing Career Change or Retirement

What about the career changer–the person who is unhappy on a job and wants something new, or goes back to work after raising a family, or becomes unemployed because of economy cutbacks, etc.?

Two secondary career counselors in the suburbs of Chicago have attempted to solve this problem by offering a career planning course for adults through high school continuing education departments.

Although the two programs were planned independently, they are quite similar in content and length. General course content includes interest and aptitude testing, values clarification and decision-making activities, occupational and educational exploration using resources available at each school, and individual counseling. Some role-playing interview situations are also included, and speakers from the State Employment Service are also present during each course.

Both programs were designed and presented to the continuing education departments for approval. In one program a limit of 15 participants was set, while a limit of 20 was set for the other. Participants have ranged in age from 19 to 57, with slightly more than half being female. Educational backgrounds have varied from those with a high school diploma to those with a doctoral degree, and unemployed as well as working professionals have enrolled in the course.

Evaluations by participants indicate that the programs are assisting participants in discovering their values and interests and making commitments to change their life/career styles.

Session 318
Career Education for Adults Undergoing Career Change or Retirement

Skills for Career Education Coordinators Cited

The Director of the Elkhart, Indiana Career Education Project discussed the role of the career education coordinator and emphasized the skills and talents the coordinator should bring to the job.

The career education coordinator should: (1) be able to plan and implement a variety of in-service programs for all phases of education; (2) be able to involve community agencies in the program; (3) be able to write newsletters, proposals, and meaningful news releases; (4) be able to identify career education activity; and (5) be a skilled budget and school finance manager.

The participants in the session developed the following list of "can do's" necessary for career education coordinators. The career education coordinator can:

1. perform long-range planning
2. establish the structure for, and carry out, needs assessment systems
3. motivate business, industry, and labor to involvement
4. build political power bases
5. write goal statements
6. write proposals
7. design evaluation systems
8. cope with problems and maintain enthusiasm for the project.

Session 322
The Career Education Coordinator

Standing, Dr. Bobby Anderson, Professor of Education, University of Alabama, Birmingham, Alabama, in a session on The Counselor Educator in Career Education.

Computers Provide Large Data Base For Career Information

The Asbury Park, New Jersey Board of Education presently provides computer services to over 55 school districts in New Jersey. Computer use from remote locations is made possible through the use of computer terminals and a sophisticated network of data communication utilizing Time-Division-Multiplexing equipment.

Counselors and students are currently using three career-oriented systems: the CACIS I, CACIS II, and the Guidance Information System.

Phase One of CACIS (Computer-Assisted Career Information System) contains information on students' career goals, skills, work experience, employment status, special talents, and physical limitations. This information is matched with student employment opportunities as they arise.

The CACIS II is a collection of resource files containing information in various curriculum and guidance areas. The People File allows the county schools to maintain current data about individuals available to assist students with respect to a given career interest. The Places File provides current information about businesses, industries, and public agencies which could be used as resources for field trips, prospective places of employment, apprenticeship programs, community educational opportunities, or referrals to social services agencies. The Media File catalogues books, filmstrips, movies, pamphlets, kits, and instructional games for use in curriculum and guidance programs.

The Guidance Information System contains data on occupational, educational, vocational, and financial aid. It includes a file describing over 1,400 occupations, a file describing over 1,600 4-year colleges and universities, a file describing over 1,000 2-year colleges, a scholarship and financial aid file, and a file on State trade and technical schools.

Session 324
Planning and Managing a Career Information Center

Alaska Program Redefines Classroom as Community

Human resources are an integral part of the instructional format used in the "classroom" of the Kodiak, Alaska Experience-Based Career Education (EBCE) program.

In Kodiak, however, the classroom has no walls; it has been defined as the entire community, including the fishing fleet, local retailers and businesses, government agencies, and the U.S. Coast Guard base.

Students spend approximately 50 percent of their time in the community, exploring careers and gathering information about careers. Resource people interact with students both in the learning center and in traditional work settings.

The Kodiak program staff believe that the key to coordinating activity between students and resource people rests in clearly stating program requirements and communicating openly with both students and resource people at the inception of the program.

The EBCE program in Kodiak is based on the assumption that many young secondary school students are ready to see and experience the adult world firsthand. Thus, the program is designed to help young people make a successful transition from adolescence to adulthood.

Session 333
Experience-Based Career Education

Mr. Gregory Moo, Director of Experience-Based Career Education and Vocational Education, Kodiak High School, Kodiak, Alaska, in a session on Resource People in the Classroom.

Project CAP Views Career and Academic Education as Inseparable

In northwest Arkansas, a program known as Project CAP has been launched to make academic and career education a common entity. It was determined that if pupils, parents, teachers, and the community viewed academic and career education as inseparable, the result would be individuals better able to cope with life in a changing society.

Project staff designed learning packets known as CAP LAPs to integrate career awareness into the curriculum for grades 1-8. These packets have been written for eight instructional levels and were designed to be used as motivation or introduction, practice or reinforcement, or evaluation of a specific academic skill appropriate for a given instructional level. In addition, a career story emphasizing the concept of work as a way of life as well as tools, tasks, training and education, traits, and economic information regarding an occupation which would employ that particular academic skill was included in each learning packet.

Special packets which have been designed for teachers include a statement of the performance objectives of the academic skill, a career description, and suggestions for use. The teachers are encouraged to use packets at the rate of one per week as a part of the regular academic subject presentation.

Progress toward the goal of increased career awareness in the 15 U.S. Office of Education clusters is measured by a staff-developed career awareness test administered as a pre-test in the fall and a post-test in the spring. Each grade level in the project has shown mean gains significant at the .01 level.

Session 336
Curriculum-Infusion Approaches to Career Education (Grades K-12)

California Company Enlivens Career Education With Simulation

California Learning Simulations is a business based on the idea of attempting to enliven career education with classroom gaming/simulation.

During this session, typical career education simulations were discussed, with emphasis on the power of this medium to stimulate learning interest and bring about measurable change in academic skill subjects. Involvement exercises were used to sensitize the audience to the basic principles of classroom gaming/simulation in general and their application to career education in particular.

Ways in which career education gaming/simulation materials can be developed by teachers were also discussed.

Session 337
Simulation Techniques in Career Education

Richardson Uses Field Trip as Sneak Preview

The field trip is viewed in Richardson, Texas as an excellent method of allowing the student a "sneak preview" of how subject matter is used outside the four walls of the classroom. From field trips, students become aware of the fact that money is not the only factor to be considered when they assume the responsibilities of a job.

Richardson staff members believe that certain conditions must be satisfied in order for field trips to be effective. Pre-trip classroom work, such as selection of site, signing of permission forms, scheduling, housekeeping details, and (most importantly) support or reinforcement of the factual material presented in class must be performed.

In cases when school districts cannot provide or allow full-day or half-day trips, alternative trips can be presented. These include activities such as bringing a field trip to the students by a resource speaker or a videotaped program of a business unable to accommodate large groups for on-site visitation, or use of resources within walking distance of the school—e.g., a math class visiting the supermarket or a social studies class visiting the newspaper.

Follow-up classwork seems to be essential for any learning experience. In Richardson, no field trip is complete unless a discussion is generated to share ideas, information, and reactions, and unless an evaluation is performed.

Session 338
Career Education and the Field Trip (Grades 7-12)

Mobile Classrooms Bring Materials to Montana Schools

Two specially equipped mobile classrooms staffed with two career counselors visit schools in Missoula County, Montana to assist in career awareness and exploration for eighth grade students. This is part of the Life Career Program, which emphasizes the elements of self-awareness, home-family living, occupational exploration, educational awareness, and leisure awareness.

The Life Career Program is based on the premise that individuals experience various "life careers," such as family member, consumer, friend, producer, recreationist, and community member, throughout their lives. The program strives to help students acquire an awareness of many of life's roles with the expectation that they will increase their chances for becoming fulfilled individuals.

The first mobile unit, the Life Career Center I, is a 10- x 45-foot mobile classroom containing audiovisual equipment which serves primarily as a media center. This unit is used with the self-awareness, home-family, educational, and leisure units.

The second mobile classroom, the Life Career Center II, is a 12- x 55-foot mobile unit specifically designed and equipped for Project Discovery materials. Project Discovery is utilized in the occupational awareness unit which permits students to perform tasks common to occupational areas using authentic tools, instruments, materials, and procedures.

While the Life Career Program is transportable, it is also suitable for stationary settings. All components used could be installed in a classroom-laboratory setting with minimal expense. In addition, students could be transported to the program site if this situation suited local needs more effectively.

Session 339
Mobile Units in Career Education

Wichita Emphasizes Individualization in Elementary Infusion Techniques

Four major components comprise the Wichita, Kansas career education program in elementary education, and all of them focus on individualization of instruction practices.

The Career Education Activity Kits (CEAK) program was developed on the premise that teachers do not generally have time to make hands-on activities that are suggested in standard curriculum guides. Therefore, the materials required in each CEAK activity are provided in the kit. The CEAK program distinguishes activities for all elementary children through three grade level groupings: K-2, 3-4, and 5-6. In addition, some activities are appropriate for students with special needs. The material is not sequential and is intended as an aid to achieve preestablished instructional outcomes.

The Resource Exchange and Clearinghouse (REACH) was organized to provide a centrally located community resource file for teachers who are planning field trips or attempting to locate resource people. The file includes the names of businesses available for classroom tours and resource people willing to come into the classroom. A full-time secretary acts as a liaison between teachers and REACH participants for scheduling purposes.

Two elementary career education teaching specialists assist classroom staff in planning, implementing, and evaluating the infusion of career education concepts into traditional curricular areas on an individualized basis. They also conduct awareness conferences and in-service training for new teachers.

A monthly career education newsletter is also produced, which contains guest editorials from the career education advisory task force, a section clarifying career education as an educational philosophy, suggestions for new activities for individualization, and a list of new community resources.

Session 340
Individualized Instruction Practices in Career Education

Mr. Odell Melton, Director, Career Awareness Project, Houston Independent School District, Houston, Texas, shows participants slides in a session on The Career Education Coordinator.

Career Motivation Project Focuses on Values Clarification

The Small College Consortium in Washington, D.C. outlined strengths and weaknesses of its Career Motivation Project (CMP), focusing on self-identification and clarification and self-extension to career options.

Originally developed for students in secondary school as an alternative approach to education, the program attempts (via a small-group experience) to heighten students' awareness of their values, interests, and skills and to help students extend themselves into compatible career areas.

Upon completion of a CMP experience, students in grades 7-14 should be able to identify their personal strengths, interests, abilities, and career values; identify possible personal career areas; and, given a rating scale, relate the degree of congruence between the self-defined and the self-extended career area.

According to an evaluation of CMP by New York pilot schools, strengths of the program include student and counselor enthusiasm, potential for greater counselor/student rapport, administrative and faculty support, potential as a group-process tool, low cost, and assistance from CMP staff. Weaknesses include the amount of time required to complete the process (approximately 6 hours); the requirement for small groups; certain component areas; professional resistance from some teachers or counselors; limitations for special groups; skills required of group leaders; paperwork required of students; and facilities required for group sessions.

Session 342
Values Clarification Techniques in Career Education

Industry-Education-Labor Establish Partnership in Illinois

Industry, education, and labor are collaborating on career education activities in Illinois via a project entitled the Tri-County Industry-Education-Labor-Council.

Funded by the Research and Development Section, Department of Adult, Vocational, and Technical Education, Illinois Office of Education, the council has established partnerships with the Illinois Office of Education and various industry, education, and labor organizations in neighboring counties.

An in-depth review of the council's successful career education-related activities was presented, and the "do's" and "don't(s)" of council establishment and operation were discussed.

Session 352
Industry-Education-Labor: The Partnership

Mr. Paul Musgrove, Executive Director, Tri-County Industrial Education Council, East Peoria, Illinois, demonstrates materials in a session on Industry-Education-Labor: The Partnership.

San Diego Develops Project Choice

The elementary career awareness project (Project Choice) in the San Diego, California Unified School District is in its developmental stage.

The program staff is in the process of field-testing over 80 teaching units at all elementary schools. Most of the teaching units contain ten 45-minute lessons which can be infused into the curriculum at various times during the day. In each unit, the need for academic, artistic, physical, and social skills is emphasized.

The program uses an individualized approach and allows each child to meet his/her needs and to work at his/her own level. This is accomplished by use of a set of at least 20 task cards which accompany each study unit. The task cards provide a choice of activities varying in difficulty so that each child can experience feelings of success.

Introductory units include interview sheets, job awareness inventories, personal preference inventories, guest speaker questionnaires, and field trip guide sheets. In conjunction with the lessons and task cards, these units assist children in answering questions about why people work, why a person would select one career over another, why training is necessary for jobs, etc.

In addition, parents participate in the program as guest speakers, field trips are taken to various community businesses, and numerous audio-visual aids are used to promote self-awareness and career awareness.

Session 406
The Elementary Teacher in Career Education

Ohio Model Makes Science Relevant

The Ohio career education model stresses continuous career development from kindergarten through grade 12 and is based on the development of the student's understanding of the part that seven areas play in reaching a sound career decision.

An explanation of these seven areas and specific career activities in science provides ways of making science interesting and relevant to today's society.

First is the area of "self," or how a person sees himself, how he thinks others see him, and how he would like to be. Activities in science for this area could include studying the nervous system, explaining school testing and how it relates to self, explaining how hobbies such as rock or insect collecting are related to career choice, etc.

Second is the "individual and the environment," or how a person relates to other people and experiences in his environment. Activities could include discussing who works; why people work; how man has changed the environment; and new jobs, tools, or devices not available in the past.

Third is "decision-making," or values, information, and strategies as essential elements by which a person makes choices. One activity here could be to have students list all positive and negative features of some device or element of the environment, decide if an alternative exists, list pros and cons of alternatives, and decide if and why an alternative should be used.

In the fourth area, the "world of work," activities could include making newspaper collages of science-related jobs, planning a production line for holiday decorations, requesting that students complete applications for jobs in the classroom, etc.

In the fifth area, "education and training," or activities which the student may need for job preparation, students could develop job ladders in careers such as nursing and identify amounts of training required for various jobs or courses needed in high school to reach a specific job goal.

In the sixth area, "economics," students could sell some product they have made and determine all costs, including labor; identify products by commercials and determine size of packages for food and cost per ounce; or set up a sample budget showing ways they could use salaries from various jobs.

Finally, in the area of "employability and work adjustment skills," students could develop teams to complete a particular project and discuss the roles of team leaders and workers, things they like or dislike about their jobs, etc.

Session 407
The Elementary Science Teacher in Career Education

Ms. Rosemarie James, High School Teacher, Akron, Ohio, discusses The Elementary Science Teacher in Career Education.

Career Education Goals Relate to Elementary Math Curriculum

A teacher from Cincinnati, Ohio told participants that career education goals lend themselves well to the type of math instruction noted as best by educational psychologists for elementary school children.

The use of manipulative materials and experimentation with puzzle and pattern activities to build self-confidence was discussed.

Opportunities to learn classification and sorting skills help children to learn about relationships and patterns and assist with the memorization process.

Estimation and probability exercises provide basic math concept development and promote positive self-image in children.

Economic awareness, including games and activities to teach children about being producers and consumers, can be easily infused into the math curriculum.

The need was stressed for students to work with everyday life materials such as tools and maps, and to go on numerous field trips, using data collection and graphing that information as follow-up to the trips.

Decision-making skills, problem solving, and logical thinking experiences can result from use of commercial games such as chess or Monopoly or simple riddles.

Session 408
The Elementary Math Teacher in Career Education

Ms. Jayne Beckner, Elementary Math Teacher, Princeton School System, Cincinnati, Ohio, in a session on The Elementary Math Teacher in Career Education.

Ocean County Develops Vocational High School Articulation

In Ocean County, New Jersey, the Vocational-Technical School has developed a countywide career education articulation program with financial aid from the New Jersey State Department of Education, Vocational Division.

Involving educators and students by firsthand experiences at the vocational school, the program attempts to develop a kindergarten-to-adult career education model including all county school districts as well as community college and adult evening school. This enables the vocational school to become the facilitator for career education curriculum development, career counseling, teacher workshops and graduate training, summer exploratory programs, and a school/community career resource center.

The project became fully operational in January 1975 and began with the development of a career resource center housed in one of the schools. This was followed by conducting graduate courses in career education in the vocational schools and the establishment of two model sites to use articulation in the school curriculum.

Learning units were designed, including mini-trips, materials and literature for career counseling, teacher workshops, and summer exploratory programs.

Model sites were then encouraged to develop teacher and counselor interns to continue the project, and model districts were expanded.

Session 410
Career Education Practices: Area Vocational High School

Portland Produces Materials for Careers in Music

In Portland, Oregon, a new set of materials has been developed for music teachers, classroom teachers, and career education counselors interested in careers in music and music-related areas.

The set includes a list of careers in music and music-related fields, a matrix illustrating the interrelationship of music and career education, and a montage videotape introducing briefly each of the 14 programs in the series.

During this session, the program featuring a choreographer/dance instructor was used to demonstrate use of the accompanying activity lessons and companion glossary. Clips from several other tapes in the series were used to facilitate an understanding of total program intent, and sample handbooks of printed materials were discussed.

One aspect of the series that was emphasized was the fact that many musicians are employed in multiple roles.

Session 411
The Music Teacher in Career Education

San Antonio Community Colleges Offer Variety of Career Education Activities

Eleven specific examples of career education practices in the San Antonio Union Junior College District, San Antonio, Texas, were cited in this session.

Junior college students seeking admission to professional medical schools receive advice on application and resume preparation from a 5-member Medical Advisory Committee composed of college faculty. Field trips by college students to the laboratories and medical schools are also part of the program.

The Advisory Committee for Occupational Education and Technology monitors and maintains programs in associate and applied sciences. Members of this community are not paid and are not employed by the college. Every junior college in Texas has such advisory committees for similar programs.

Seminars and workshops for high school and college students and faculty are held in a variety of fields, such as health careers, communications media careers, and careers for women, in conjunction with a variety of community organizations.

Practica are sophomore courses in which the student spends time in a job in the field, with the supervision of a counselor.

Open houses and visits are held on the community college campuses for high school counselors and principals as well as to give a chance for prospective employers to talk to students and faculty.

Two-year follow-up programs are being conducted under the auspices of the Texas Education Agency to follow up graduates into life situations.

Formal counseling and guidance are offered for entering freshmen, particularly those who have not yet decided on a major field of study.

Several special groups offer career education for older women returning to school, culturally and economically disadvantaged students, and physically handicapped students.

Continuing education aspects are strong on vocational themes and assist citizens of the community on a short-term basis in securing or upgrading employment.

The skills center provides job-related education for the hardcore unemployed. Among other activities, here trainees are taught basic techniques of human relations, simulated interviews are held, resumes are written and rewritten, and tailormade instructions are given the trainee regarding his/her chosen career field.

Graduate student internships are also offered at San Antonio community colleges, particularly in education and psychology. Graduate students receive a supervised opportunity in counseling and educational administration and generally intern for one semester.

In general, the session leader indicated that all Texas junior colleges (known as the NOW colleges due to recent efforts to become more modern and flexible) attempt to offer salable skills and general education.

Session 413
Career Education Practices: Community College

Michigan Counselors Facilitate Pre-Service and In-Service Career Education Programs

Michigan counselor educators help prepare counselors in training and in-service counselors for better understanding and implementation of career guidance programs as part of the State's overall plan for career education.

The Michigan career education model integrates career preparation and career development for students. Counselors *support* educators in the career preparation component areas of academic, vocational, and technical education. Counselors are *actively involved in* aiding students in the career development component areas of self-awareness and assessment, career awareness and exploration, career decision-making, and career planning and placement.

At Wayne State University in Detroit, counselors in training are provided with a thorough review of the Michigan career education model and the role of counselors in implementing career development programs for students. In graduate-level courses, counselors in training are shown types of activities which can be used with all grade levels in self-awareness, career awareness, decision-making, and planning. As part of course assignments, counselors in training are required to plan, implement, and evaluate a career development activity with students in a field setting.

In field workshops with practicing counselors, counselor educators can follow the same format as provided for the counselors in training. However, emphasis is placed on relating the State model to that adapted by the local school district and on the increased involvement of counselors with students, teachers, and local business, industry, and placement personnel.

Session 416
The Counselor Educator in Career Education

Superintendents Initiate and Implement Career Education

School superintendents play a distinct role in initiating and implementing career education in the school district and must often use available staff and community resources with no State or Federal financial aid.

Representatives from Meridian, Mississippi emphasized that this role can include (1) the introduction of the career education concept to the staff and community by use of private endowments for speakers to be brought into the community to generate ideas; (2) use of principals' building plans to initiate career awareness in staff personnel and classroom instruction; (3) selection of pace-setters among business and community leaders to enlist resource people and organizations; (4) provision of personnel, time, and materials for in-service training of staff members; (5) support of innovative ideas of staff and community personnel; and (6) provision of leadership in implementation and evaluation of career education programs.

The career education program in the Meridian school district consists of career awareness infused into elementary and junior high grades and a community-based career exploration experience in senior high school, coupled with infusion of career education into the existing social studies curriculum.

Session 420
The Superintendent in Career Education

Georgia Conducts In-Service Staff Development Programs

Three in-service staff development programs have recently been conducted in Georgia.

The first was a program focusing on the career development needs of secondary school comprehensive high school students involving increased cooperation between academic, vocational, guidance, and administrative personnel. This program was conducted in two Georgia secondary schools which were in the process of attaining status as comprehensive high schools by expanding career, vocational, and guidance-related services.

The second program emphasized career development through personalized instruction for disadvantaged learners. It was conducted as a year-long effort in a Georgia comprehensive high school (grades 8-12).

The third project, funded by the U.S. Office of Education and conducted in the College of Education, University of Georgia, focused on fostering the inclusion of career development competencies in pre-service teacher training curricula. This project involved extensive staff development in career education of college professors. The project was an interdisciplinary effort and included ten departments within the college.

Session 423
Staff Development Practices and Programs in Career Education

Toledo Businesses Actively Involved in Career Education

The Champion Spark Plug Company and the Ohio Bell Telephone Company are among the Toledo, Ohio area businesses and industries that have been actively involved in the career education program in the Toledo public schools.

Champion Spark Plug Company emphasizes junior high career orientation and has participated in the Toledo Area Chamber of Commerce junior high partnership program which allows junior high classes to visit two or three companies a year to learn about the world of work on a firsthand basis. Before a class visits the company, a company representative shows a film about spark plugs and how they are made, presents information about the company, and answers questions. Each student receives a personalized packet of information that includes an annual report, a guide to the plant tour, a list of job opportunities at the plant, and the educational level required for each position. The plant tour concludes with lunch for students with their guide and at least one company employee. The day after the tour, the company representative returns to the classroom for a follow-up session.

Champion is also involved in the "pre-employment clinic," whereby representatives of Champion's employment office spend several days in senior high school government classrooms talking about employment opportunities, interview skills, job applications, resumes, etc., and conducting interviews with the students.

The Ohio Bell Telephone Company has developed a K-6 multi-media program known as "Telezonia" which is used in all Ohio public schools. The program includes a film, sound filmstrips, a teacher guide, spirit masters, and a teletrainer unit. These materials are circulated among K-6 classrooms in various schools. Classroom visits from the installer and other company employees are arranged at the teacher's request. The installer not only brings his equipment to the classroom and talks with the students, but takes them outside and shows them his/her truck, climbs a telephone pole, and explains the importance of safety in his/her job.

At the junior high level, Ohio Bell has also been actively involved in the Toledo Area Chamber of Commerce junior high partnership program.

Senior high students are able to spend a day shadowing a telephone company employee as part of the sophomore placement program.

Ohio Bell has also hosted an educator for three

weeks during the summer as part of the Career Awareness Workshop. During this period, the teacher-employee holds a minimum of ten different jobs at all levels of employment within the company and is treated as a beginning worker in each position.

Session 424
Large Business and Industry in Career Education

Supervisors and Directors of Instruction Work With Career Education in Curriculum

The principal of a Southfield, Michigan school told participants that supervisors and directors of instruction in career education serve staff members and the community by working with the many-faceted roles of curriculum.

The director of instruction works closely with central staff personnel, administrators, counselors, heads of curriculum departments, teachers, aides, other school employees, and students.

It is important that a career education instructor meet the needs of these adults and those of parents, business, industry, and citizen advisory groups.

Directors of instruction must be responsible for infusing materials of all types concerning instructional areas with career education, ensuring that Federal and State guidelines are met, and assisting each school system with writing its respective objectives and evaluating its program.

Session 437
Supervisors and Directors of Instruction in Career Education

Lexington Establishes Career Education Resource Center

A career education resource center has been established in Lexington, Nebraska for students in grades 7-12. The resource center has three locations, one in the junior high school, one in the local parochial school, and the main center in the high school.

Seventh and eighth grade students use materials from the center for conducting values clarification exercises.

Ninth grade students play the career game to explore different careers; select a career and use center materials to complete a specially designed outline for an in-depth look at a single career; take field trips to local industries to observe different employment opportunities; and spend one-half of a day with one member of their family to gain an understanding of that person's job and how it relates to the family.

In the sophomore year, students learn about personal interview job application forms, resumes, and letters of application in English classes. The skills of writing a research paper are correlated with writing a paper on one career.

The career center at the high school includes a job placement bank for which students may register and from which they may be placed in suitable jobs. The center staff also has developed a survey resource book of local resource people who are available to speak in the classrooms.

The career center is staffed by a director and a coordinator.

Session 438
Career Education Resource Center (Grades K-12)

Newspapers Teach Career Education at All Levels

Newspapers can be used very effectively as supplementary teaching tools in career education. They are current, factual, realistic, interesting, and inexpensive, and they generally report work situations as they are rather than propagandizing them.

This session focused on a discussion of the Texas model for career education and how the newspaper can be used to provide specific career education activities at various grade levels.

For the K-6 level (career awareness), the newspaper can provide a primary resource for identifying people and incorporating involvement with people into each content area of the curriculum. Activities could focus on the newspaper as a source for identifying the major ways in which people occupy their time, the identification of people in the various occupations represented in newspaper stories, and direct contact with people identified from the newspaper through personal interviews and/or correspondence.

For the middle school level (career orientation/investigation/exploration), the newspaper provides teachers with a great deal of material to enhance student exposure to a wide variety of careers, requirements, and rewards; values and interests; economic situations; etc.

At the secondary/post-secondary level (career preparation), the newspaper can be used to implement

and enhance career education information in the classroom and to assist students in developing entry skills for the world of work or vocational school or college programs.

Session 441
Career Education Practices Using the Newspaper

Mr. Roger Melton, Career Education Component Consultant, Region X Education Service Center, Richardson, Texas, in a session on Career Education Practices Using the Newspaper.

Career Education in Department of Defense Dependents' Schools is Dynamic Concept

The Department of Defense Dependents' Schools serve the dependents of American military and civilian personnel stationed overseas in 26 foreign countries. Currently the K-12 enrollment for these schools is 150,000; thus the need for systematic management of career education in these schools is obvious.

Recently a 5-year plan has been devised for systematic management of career education. This plan was developed jointly by staff from the three geographical regions (Atlantic, Pacific, and European) and Department of Defense Dependents' School Headquarters staff in Washington, D.C. The plan provides for objectives, instructional alternatives, essential texts and materials, and evaluation for each year of the 5-year period. Each of these categories has certain tasks and completion dates assigned to it, and responsibilities are designated accordingly.

A career education curriculum systems model has also been designed, and program and instructional objectives for career development have been defined.

Session 442
Career Education in the Department of Defense Dependents' Schools

Effective Career Decision-Making Based on Values Clarification

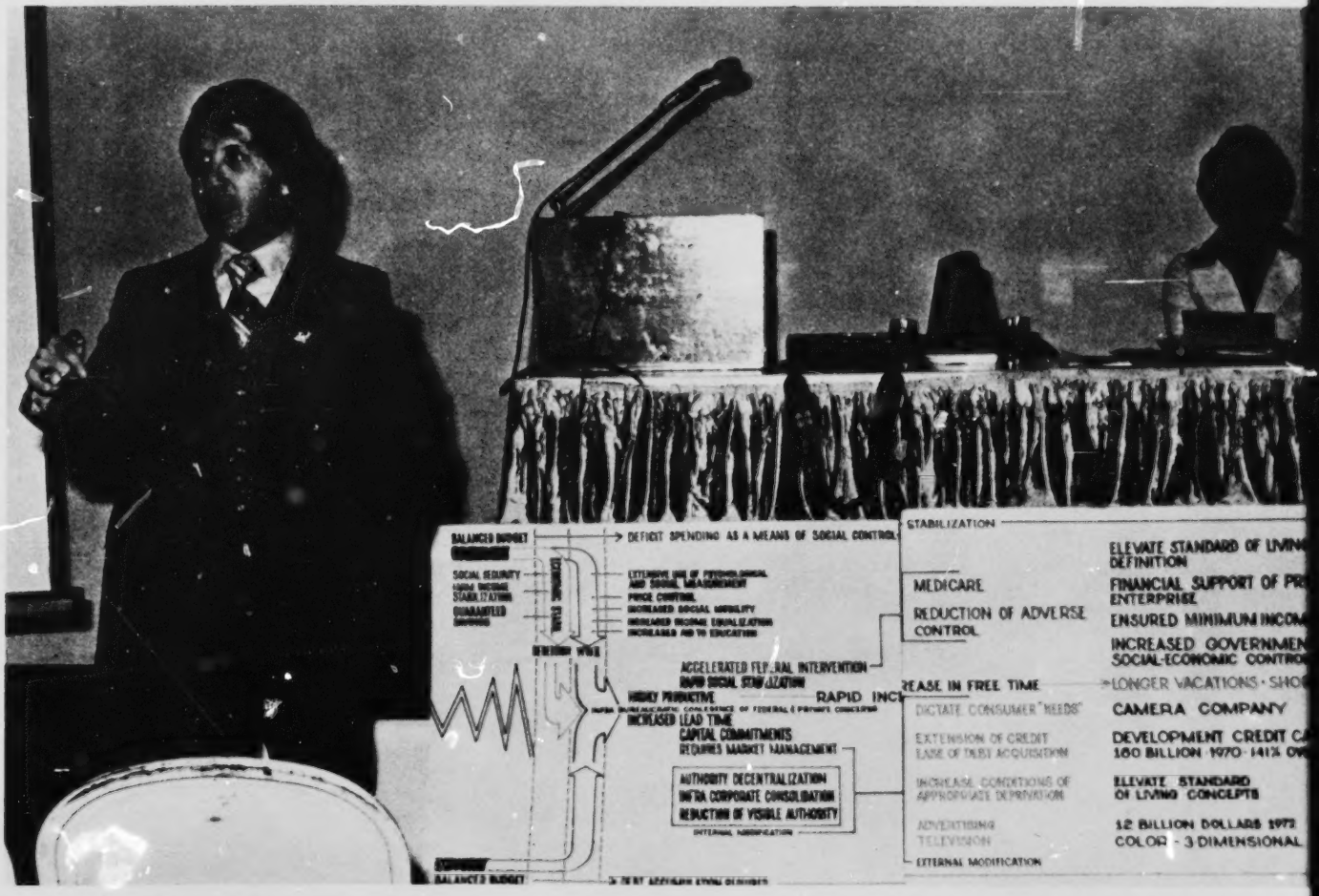
Effective career decision-making must be predicated on a clear awareness of one's own values. Students need to learn the valuing process of choosing, prizing, and acting in order to make choices which will fulfill their own unique needs and goals, according to leaders of this session.

A variety of theories of helping have evolved from the works of Freud, Jung, Adler, and others. The behavioralists, however, stress one aspect of particular importance to the helping relationship: the fact that helpers—counselors and teachers—should help students learn the processes of coping, and not just help them with the immediate situation or crisis. The importance of clarifying what is important to students, their values, must not be overlooked.

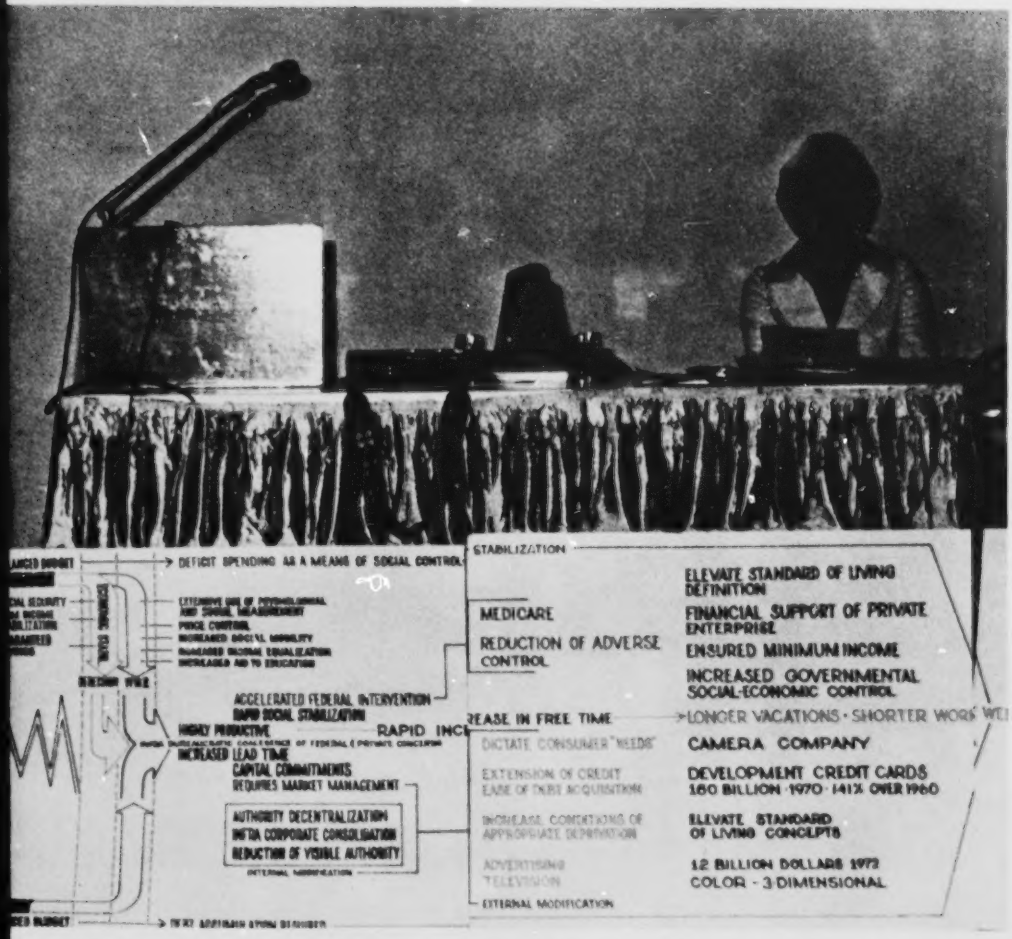
It is important not to simply discuss or clarify current values, but also for the student to learn the process of valuing so that he/she can apply this process to future decisions which must be made without the assistance of a professional helper.

Several films were shown during this session on career decision-making and how a counselor would help students to learn the valuing process while applying it to current situations in their own lives.

Session 444
Values Clarification Techniques in Career Education



From left, Dr. Dennis W. White, Coordinator of Graduate Studies in Art Education, and Dr. Phyllis Knerl Miller, Chairperson, Art Education, both of the Department of Curriculum and Instruction, College of Education, University of Houston, Houston, Texas.



Graduate Studies in Art Education, and Dr. Phyllis Knerl Miller, ment of Curriculum and Instruction, College of Education, Uni-

Iowa Model Incorporates 2-4-8 Approach

In 1971, Iowa Central Community College of Fort Dodge, Iowa and 33 schools from Area V initiated a project to implement career education in classes from kindergarten through twelfth grade.

Based on the "2-4-8" approach, the Iowa model holds that there are two basic concepts in career education—understanding of the world of work and development of self-concept. The "four" relates to the four time segments of the plan (awareness, grades K-3; accommodation, grades 4-6; exploration, grades 7-9; and exploration plus preparation, grades 10-12). The "eight" indicates the eight elements of career education: self-awareness, educational awareness, career awareness, economic awareness, decision-making ability, beginning competency, employability skills, and attitudes and appreciation.

During the exploration and preparation stage, there are three alternatives: career education infused into the existing curriculum, vocational courses related to specific careers offered either at the high schools or at special centers, or experience-based career education.

The plan is that the Iowa model will be implemented in all Area V schools in a 3- to 5-year period.

Since most schools in Area V serve rural areas and are too small to have an individual career coordinator, leagues of schools were formed. A typical league includes from 10 to 12 individual school systems and is based on the combined efforts and resources of local school boards and administrators.

Three leagues were formed for this project. Each league is served by a career coordinator who, in conjunction with the curriculum committee for each school, designs a career education plan for each school.

Due to its experience in vocational programming, the Iowa Central College plans, develops, and staffs the career education centers for Area V students and assists schools in designing and implementing their projects.

Session 450
Career Education Practices: Rural K-12 Settings

Lawrence Program Adapts Career Education to Student Needs

In Lawrence, Kansas, the career education program begun in the early 1970's was built on the foundation laid during the 1950's and 1960's when several work experience programs were developed. Good business-education relationships had already been established and business-industry-education days were being held to promote knowledge of the business community for teachers.

The Lawrence program follows the basic U.S. Office of Education model of awareness for elementary, exploration for junior high, and preparation for senior high levels.

To encourage career education infusion into all subject areas, resource speakers, tours of the business community, materials, and a variety of activities and hands-on experiences for students were used.

Work experience programs have continued to expand over the years. A special education program using a work experience approach was begun in 1971 and has continued to expand.

Other ongoing activities have been the career fair, career seminars, and establishment of a career center. Community resources have provided a consistent area of growth for the program. Curriculum guides with an emphasis on career education have been developed and will be used as pilot materials for other high schools in Kansas as they develop their own career education programs.

Session 451
Career Education Practices: Small City Settings

Technology for Children Approaches Career Education Informally

The Technology For Children Program, also known as T4C, is a career education program used in Bayonne, New Jersey in grades K-6 which began in 1966.

The program is based on a less formal, hands-on approach to the curriculum. Most classes are divided into learning centers with small groups. Primary grade teachers introduce students to careers through the use of over 30 units in areas such as leathercraft, paper recycling, rocketry, batteries and bulks, ceramic tiles, rock polishing, weaving, use of printing presses, etc.

A variety of kits are provided to trained teachers on a lend-lease basis so that the materials and equipment in the kits are constantly available.

The program has been recognized as a T4C training center by the State. To date, over 150 prospective teachers have received training through the resource center.

Recently, elementary school students have begun forming student clubs associated with T4C. Two of the most successful of these are rocketry and photography, both of which function in fourth through sixth grades. The newest program effort is a special training program in cardiopulmonary resuscitation, whereby students receive a 10-hour mini-course in the basics of CPR.

Session 507
Career Education Practices: Early Primary Grades

Monterey Staff Present Activity-Oriented Practices for Upper Primary Grades

Four strategies for infusing career education objectives into classroom instructional programs which have been developed and tested in Monterey, California include an elective program, a model city, "Box Land," and career development through reading. Each approach includes activities which involve students in making relevant decisions, career awareness, self-awareness, exploring new interests and opportunities, applications for basic skills, work disciplines, economic understanding, and applying work skills.

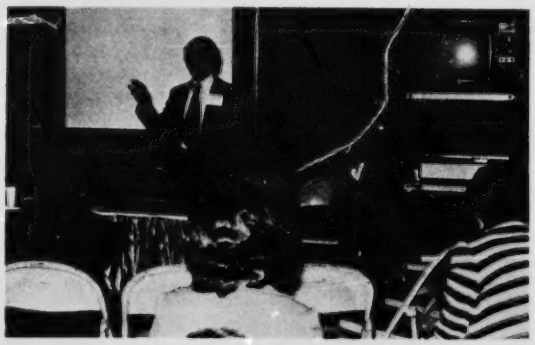
Under the elective program, students and the school staff plan electives or mini-courses to be conducted each week on a half- or full-day basis. Parents and other community resource people provide the appropriate skills, talents, and experiences for conducting these mini-courses.

The model city approach involves students in planning, constructing, and simulating the operation of a scale model city of the future in their classrooms. Planning includes geographic, demographic, economic, governmental, architectural, and occupational characteristics. The approach uses extensively the resource people from the community representing a variety of occupations.

"Box Land" is a simulated interdependent small business and professional community planned, constructed from refrigerator shipping cartons, and operated by the students within the classroom. The community includes a bank, bakery, carpenter shop, beauty shop, theatre, school, and church. Community activities are conducted one-half of a day each week.

Career development through reading involves the use of instructional guides for teachers with students in the recreational reading program. The intent is to involve students in career-related discussion analysis of the books read, including how the story characters made decisions, their values, work performed, interpersonal relationships, work habits, and economic and educational influences.

Session 508
Career Education Practices: Upper Primary Grades



Mr. Rodger Smith, Project Developer (Elementary), Monterey School System, Monterey, California, in a session on Career Education Practices: Upper Primary Grades.

Island City Students Run Model City

Elementary school students in Island City, Oregon participate in a model city known as Y-land. Their teacher feels that they are gaining awareness of jobs in the community and their responsibilities as well as how to run a business or have a job and make a success of it.

Some of the steps involved in the establishment of Y-land included:

1. Orally introducing careers and businesses to students
2. Having students identify careers by visiting town businesses
3. Identifying city officials and selecting a method of setting up a classroom city with officials
4. Having students elect city officials
5. Identifying the city council by having city officials divide students into precincts according to each student's actual residency
6. Having the council and city officials accept applications for city businesses
7. Having the mayor issue, sign, and stamp business licenses
8. Making out city bills and collecting city money
9. Having students construct a floor plan of the classroom to be used to set a maximum size for lots
10. Presenting bogus money and checks for bank checking and savings accounts
11. Establishing a post office to handle mail
12. Recording income and expenses on personal and business ledgers.

As each business expands, every student is able to observe his/her growth in income, as each student keeps written records of a personal and business budget. Students gain a better understanding of an actual model economy with competition, wage and price controls, representative government, and selling or buying of products or services.

Session 509
The Elementary Teacher in Career Education

Watertown Involves Academic Classes in Career Education

The Watertown, Wisconsin Unified School District staff believes in the importance of involving the academic classes in career education. The work done in Watertown in this regard has been centered on the career education concepts adopted by the State of Wisconsin and how these may be emphasized in the classroom. Participation by teachers has been voluntary and successful; teachers have become actively interested through workshops, credit courses, or peer examples.

The emphasis has been to integrate career education into the existing curriculum rather than to create isolated career classes or units, and Watertown teachers have devised many materials and activities for actual use in their classrooms.

Session 512
Curriculum-Infusion Approaches to Career Education (Grades K-12)

In a session on The Secondary English Teacher in Career Education, conferees ask questions of presenters Ms. Patricia Peterson (second from left) and Ms. Rosemary Weyeneth (fourth from left), High School Teachers, Watertown Unified School District, Watertown, Wisconsin.

Arkansas Sets Up Model Guidance/Placement Program

The Arkansas State Education Agency has established a model school-community program in guidance, counseling, placement, and follow-up in four selected schools in Arkansas.

A teamwork approach was used to determine who would have primary and secondary responsibilities for directing activities. Arkansas State University cooperated with the State Education Agency in providing in-service training for team members in the project. Resource people from the State Education Agency, government agencies, schools, and community assisted with the project.

Counselors developed forms for keeping records to ensure that all students had an opportunity for group and individual counseling sessions. Group activities were conducted in orientation and other classes, while individual sessions were conducted by the counselors. The schools organized advisory councils to assist in planning and implementing expanded services.

During the session, ways in which the team members planned and implemented the following services were discussed: multi-media career development centers, career mini-courses, educational-vocational planning sheets, career days, job surveys, employment security, employer and student job files, placement, and follow-up.

Session 518
The Secondary School Counselor in Career Education

Parents Seen as Essential to Success of Career Education

In a session on Parents in Career Education, a New Haven, Connecticut career education specialist said that there are three responsibilities which should be assigned to parents in terms of career education: (1) knowledge of the career education concept, (2) participation in school career education activities, and (3) involvement in career education at home. These responsibilities constitute the learning objectives of a comprehensive parent in-service workshop or series of workshops.

To fulfill the first objective, it was suggested that Marland's triangle model be discussed in detail. Also described was the U.S. Office of Education's pyramid model, which shows the developmental nature of career education and clearly illustrates that career education does not seek to make students decide on a specific occupation in the third grade (a very common misconception).

To assist in achieving the second objective, it was noted that a short parent resource survey, filled out at the in-service session or sent home with students, generally yields a gratifying response. Such a form

typically inquires about parents' work, their availability to have groups of students visit their place of work, their willingness to help out on school career days, etc.

The third objective, that of promoting the free and open exploration of careers at home, is the most difficult to achieve since it requires the acquisition of several new interpersonal skills as well as a serious reappraisal by parents of their career-related values and, in some cases, their whole style of "parenting." Presenters noted that parents can be taught a number of specific behaviors that will facilitate open, honest communication between themselves and their children, not only in career-related matters but in many aspects of their relationship.

In summary, it was pointed out that career education for parents, as for children, is both a cognitive and an affective process and that a comprehensive in-service program will operate in both modalities.

Session 519
Parents in Career Education

Corpus Christi Adopts 'What's My Line?' Format

The Corpus Christi, Texas Independent School District is implementing a career education program involving a variety of activities. One of the most popular of these is the "It's Great To Be" program for K-6 children. Based on the television show "What's My Line," the program involves members of the community who expose children in the classroom to the world of work in a positive and entertaining way. Children attempt to guess the occupations of these resource people and a discussion of the occupation follows.

The school district also maintains a resource book listing information about citizens who have volunteered to talk with students in grades K-12 about specific occupations or career clusters. Field trips to community businesses are also often utilized.

Another activity offered involves one-on-one "shadowing" experiences whereby students and teachers spend specified periods of time observing individuals in their natural work environment as they perform their jobs.

Corpus Christi has an active Community Advisory Committee which gives overall direction to the program, initiates and maintains community interest, and determines how the community helps and can be helped by the schools. The committee recommends strategies, assists in review and evaluation of proposed and ongoing programs, and provides assistance with public relations activities.

Session 520
Community Career Education Action Committees

Phoenix Superintendent Assists With Implementing Career Education

In 1972, the Phoenix, Arizona Superintendent of Schools was faced with a number of problems including a history of over 20 years of double sessions, segregated schools and faculties, and students with academic achievement which was several grades below national norms.

To solve these problems, a year-around school schedule was established to eliminate double sessions; students were redistricted, faculty was transferred, and a middle school was built to help desegregate teaching staff and student bodies. Staff was provided additional training in management by objectives and synergizing processes; and staff, parents, and students were involved in setting district goals, including teaching career education concepts, which focused on improving the educational program.

A comprehensive approach to implementing career education was adopted to (1) help students from kindergarten through eighth grade gain career awareness, orientation, and exposure; (2) provide training to assist staff members to infuse career education into the basic subject areas; and (3) develop community support and awareness for career education.

In 1973 the Career Education Fair was held—the first community-school - business - industry - government cooperative venture ever experienced in the south Phoenix area.

The career education project staff also publishes a monthly newsletter, assists with public relations, and coordinates activities of teacher committees and community advisory groups.

Session 522
The Superintendent in Career Education

Carroll County Project Uses Curriculum Infusion

The Career Awareness Now program in the elementary school system in Carroll County, Maryland is bringing career concepts into the classroom through the basic curriculum.

Career awareness and self-awareness are being stressed, particularly on the primary level, by the use of teacher-made lessons and materials, commercial products including audio-visual materials, and community resource people. Each career activity performed in the classroom is designed to reinforce a basic skill currently being learned by the students.

Four career resource teachers and a project coordinator help give the teachers guidelines and direction regarding career education. Under the supervision of the project coordinator, the resource teachers plan and conduct in-service programs to acquaint and refresh county teachers with new career ideas which will extend basic skills lessons into more relevant and motivating experiences for students.

Session 525
Planning and Managing A Career Information Center

Ceres Model Places High Priority on In-Service Training

The Ceres Unified School District, Ceres, California, has been developing a comprehensive model for the implementation of career education during the past three years. A high priority within this model is in-service training for all participants.

The CEIM (Career Education In-Service Model) is based on current educational practices such as behavioral/instructional objectives, process and product evaluation, the instructional techniques of simulation and gaming, and values clarification.

Presenters noted that a number of factors must be considered when an in-service plan is designed. These include questions such as what the long-range goals and objectives are, who the participants will be, and what the budgetary restraints are.

Change often occurs with a continuing in-service plan which stimulates and encourages people to continue their efforts. The first priority should be to determine the desired outcome in a given length of time. Establishing a timeline becomes the parameter within which the in-service is to occur; consequently, in-service becomes an instructional model and as such is subject to evaluation procedures. Direction is determined by the goals; procedure is dictated by the objectives written to meet the goals; activities are the processes used to accomplish the objectives; and the objectives are periodically monitored and can be adjusted.

The CEIM uses several major thrusts in developing career education practices. A series of practica and practitioner meetings is scheduled to encourage and promote group feeling. Memos and letters are sent to the practitioners throughout the year to personalize their accomplishments. Continuing in-service emphasizes refinement of ideas generated during workshops, and practitioners are encouraged to attend academic conferences to provide a basis for implementing their infusion strategies. Individual conferences and small-group meetings are also used to personalize and individualize in-service. One of the major outcomes of these meetings (which can be initiated by the teacher, the principal, the resource teacher, and/or the curriculum specialist) is the awareness of a support system for teachers as they infuse career education into their instructional program.

Session 526
Staff Development Practices and Programs in Career Education

COP Model Provides Enrichment for Gifted and Talented

Under the leadership of the Mohave County, Arizona career education project, the Mohave County Career Opportunity Program (COP) was initiated in seven school districts to provide a county-wide enrichment program for gifted and talented students.

The COP defines gifted and/or talented (GFT) students as those capable of high performance in one or more of the following areas: general intellectual ability; specific academic aptitude; creative or productive thinking; leadership, visual, or performing arts; and psychomotor activities.

To avoid the problems inherent in using IQ scores or teacher nominations exclusively, the COP uses a multiple-criteria identification procedure. Methods used to date include individual and group tests of intelligence; individual and group achievement test batteries; observations of teachers and other professionals; nominations by parents and peers; student-produced works (writings, art, music, etc.); and previous identification.

The COP uses several career-related activities to aid the gifted child, including field trips to scientific establishments and colleges; on-the-job observation of professionals at work; specialized instruction within the student's regular work; part-day pull-out from regular classes; in-depth career research; seminars with professionals, etc.

Also included in the COP are teacher in-service, involvement of administrators, parental in-service, and evaluation of the program by teachers, students, and parents.

Session 534
Career Education: The Gifted and Talented

New York Uses Numerous Curriculum Infusion Approaches to Career Education

Wantagh Junior-Senior High School, Wantagh, New York, offered a 2-day Career Days in Science program to stimulate career awareness in junior and senior high school students in the field of science. Scientists from all sectors—industry, research laboratories, universities, police, museums, etc.—were present at the program.

Information regarding occupations available for science majors was gathered by the guidance department and librarians and presented to members of the science department prior to the career days program.

Science teachers devoted regular classroom time to explaining the curriculum for grades 7-12, college programs, materials, and career paths available to the students. Career clusters were studied to show students the relationship of one area of scientific study to another. The role of the military service was also presented as were possible future technological occupations made available to potential service personnel. Scientists shared their school and work experiences with the students.

In another New York program, the Rochester City School District's Articulated Career Guidance Project has developed a sequential K-12 career guidance curriculum. The curriculum consists of guidance activities and does not include vocational skills. Elementary materials emphasize self-awareness, decision-making skills, and an introduction to the world of work. The secondary units, building on this foundation, encourage more mature job exploration as students approach their needs for individual career planning and implementing their career strategies.

At the elementary level, career guidance themes are introduced in the reading, social studies, and math curricula through learning packets and other career guidance resources.

The secondary school program includes helping students with course selection, program planning, and job and college applications and interviews.

Parents are involved in identification and utilization of career-related community resources available to each elementary school.

Session 540
Curriculum-Infusion Approaches to Career Education (Grades K-12)

New York City Involves Resource People in the Classroom

Resource people are heavily involved in career education in New York City classrooms. The New York Telephone Company sponsors a variety of programs, including teaching and audio-visual materials for use in the classroom, that examine typical careers in the Bell system, how to write a resume, how to act in an interview, and how to succeed on the job, typical career opportunities for women in engineering, etc.

In one program sponsored by New York Telephone (NYT), successful minority employees speak at programmed intervals to business and social studies classes. In another, NYT employees volunteer both personal and company time on company premises to tutor under-achieving students in academic subjects and "work itself." Promising students are also recruited in the classroom to become junior achievers.

In other programs, NYT business representatives visit schools to show the day-to-day relationship between their jobs and the student's academic efforts in math, science, social studies, and language arts; employees describe employment options in the communications industry at career fairs; and management personnel visit schools to evaluate the relevance of curriculum content to modern industrial needs.

The New York City Economic Development Council sponsors a school-industry liaison agency known as Open Doors which encourages students to explore basic economic processes and problems through experimental learning backed up by organized classroom study. Teacher-developed materials which use resource people in the classroom are integrated with curricular and instructional objectives.

Through an Open Doors Lawyers in the Classroom project, teachers are able to call upon lawyers to speak on subjects such as careers in law, constitutional history, consumer law, and criminal justice, or give help with producing a mock trial.

Open Doors also acts as an industry-education information center, as an exchange agency about activities and programs, and as an industry-education interaction service. It helps teachers design and share curricula via "educational intermediaries" (people who are knowledgeable about the work world and also have teaching skills) who devise special curricular programs including lessons, tapes, dialogues, and games. It also assists personnel in school subject departments in developing lessons relating content to uses in the work world.

Session 541
Resource People in the Classroom

Roseville Center Provides Individualized Career Planning

In Roseville, Minnesota's Alexander Ramsey Senior High School, the Career Planning Center has two basic functions. The Individual Career Planning Service branch of the center individually assists students most in need of remedial career activities by (1) analyzing the individual's career development level; (2) through counseling, helping the individual formulate his/her *most viable career development activities and strategies*; and (3) putting these activities into an action plan which he/she may execute within the school and/or community.

A separate service of the center is the Outreach Service which brings community and parent resources to the school and/or enhances the school's regular career education program by interpreting and recommending changes based on student evaluation and follow-up data as well as parent and community expertise. This facet also serves as a curriculum change agent through its analysis and follow-up activities.

Session 542
The Career Education Resource Center (Grades K-12)

Shadow Programs Capitalize on Gifted and Talented Students' Abilities

The Director of the Atlanta, Georgia Governor's Honors Program cited the following major objectives for shadow programs in career education for gifted and talented (GFT) students:

1. To acquaint GFT students with many career opportunities in their field of interest
2. To provide career opportunities through hands-on experiences in their field of interest
3. To provide challenging insight to careers that GFT students may wish to consider
4. To seek resource people to explain and challenge the GFT student to explore his/her first career choice and gain further insight as to other career choices
5. To explore the job market and recognize trends in employment opportunities
6. To involve the community with the career exploration program necessary to retain good workers within the community

Since GFT students are multi-talented, decision-making as to careers is often more confusing and complex to them. Actual hands-on experience, verbalizing with a resource person at the career site, and becoming acquainted with several career possibilities and some allied fields are all important to GFT students. Since they are quick to learn, eager to become involved, and enthusiastic about looking at new opportunities, shadow programs can capitalize on these qualities.

Session 544
Career Education: The Gifted and Talented

Michigan Programs Stress Importance of Career Decision-Making

In Flint, Michigan, a systematic career decision-making model has been successfully infused with a futuristic comprehensive computer-assisted career development support system. The system is known as ECES (the Educational and Career Exploration System) and deals with career awareness, search strategy, exploration, decision-making, internship experiences, planning, and placement.

The system is now in its fourth generation and has been redesigned and periodically updated over the past seven years.

Students learn how to use the computer terminal and microfiche viewer as support tools for learning the skills in career planning and decision-making. The system collects data on student interests, educational aspirations, values, learning abilities, interest test scores, salary desired, and preferred activities that relate to jobs. Students first learn how to weigh their values and may then request a search strategy, and the computer will print a list of occupations meeting student requirements.

They may explore over 400 occupations, 300 educational programs, or 3,000 schools and colleges in the ECES data bank; learn decision-making skills they need to decide on Day-On-The-Job or internship experiences, occupations, educational programs required, high school and college courses, etc. In addition, they may use the job bank files to look for job openings in their occupation.

Another Michigan program stressing career decision-making involves linkages between career and consumer education, and how to combine the skills necessary for earning money with the art of using money wisely. Common areas of interest discussed included values, lifestyles, career choice, and the interrelatedness of the individual as a citizen, worker, and consumer in American society. Also discussed were teaching methods and materials in consumer and career education.

Session 545
Career Decision-Making Programs

West Virginia Implements Career Education in Elementary Classroom

The Raleigh County, West Virginia school system has implemented a career awareness program for students in grades K-6.

Approximately eight curriculum units have been prepared for every grade level and are used in each classroom, and many teachers now develop their own units to meet group and individual needs.

Activities used in the classroom include role play, field trips, the use of resource people, participation in group and individual research and activities, the use of multi-media materials, and hands-on activities.

A "Key to Career Education" bibliography is used in each elementary classroom. Materials from the career education center may be ordered weekly and returned the following week.

Teachers have found that career units correlated with academic subjects will improve student attitudes and work habits and enhance feelings of self-worth.

Examples of units developed include a food and nutrition unit implementing restaurant occupations for kindergarten, a unit on oceanography for first and second grades, one on health services for third grade, one on barber and beauty careers for fourth and fifth grades, and one on newspaper jobs for sixth grade.

Session 546
Career Awareness as an Element of Career Education

Career Education Seen as 3-D Model

A speaker from the Center for Career Studies, California State University at Long Beach, California, constructed and presented a 3-D model or diorama symbolizing career education to describe and explain its many parts, functions, elements, and relationships.

The model showed career education in relation to its base, basic education, and various phases of career education such as awareness, exploration, decision, preparation, entry, and progress. Time elements for these processes were labeled, and changing relationships of phases over time were noted.

Components such as public school, private school, private business and industry, and public agency programs were also described as they relate to the topography of the diorama.

Session 547
Basic Concepts of Career Education

Ms. Dawne Friesen, Consultant to the Superintendent of Public Instruction, Toner and Associates, Seattle, Washington, in a session on Resource People in the Classroom.

Vocational Education Seen as Necessary Component of Many Careers

A speaker from Auburn University, Auburn, Alabama, addressed the topic of Career Education and Vocational Education, or (as rephrased) Vocational Education in Career Education.

Career education has been described as the education and experience one has during a lifetime in the process of successfully earning a living and living a satisfying life. Vocational education is a necessary component in most people's lives and/or careers during which they prepare for the work they do to earn a living.

However, certain societal time traps have been generated by the American lifestyle which are detrimental to the career development process of which all people are a part—namely, that youth is for learning, maturity is for earning, and old age is for obsolescence.

To bridge the gap between these traps, the system must provide for easy exit and reentry all along the way, and earning, learning, and leisure must be interwoven throughout life.

If career awareness and exploration are part of the education process at the elementary, middle, and junior high level, then vocational education can better serve every individual who has chosen to prepare for a job when leaving school or has chosen to continue his/her education to prepare for later work.

Vocational education can build on the awareness and exploration, knowledge, and experience of youth and adults and prepare them for clusters of jobs through instruction skill development centers, the study and use of present learning resources available to all teachers, cooperative work experience, and community and industry resources.

Session 548
Career Education and Vocational Education

New Yorkers Suggest Initial Steps for Implementing Career Education Programs

A panel of speakers from New York provided a "how to" approach to implementing a career education program.

Following a description of the State Project to Implement Career Education (a pioneer career education program in New York City), suggestions were provided on how to give an orientation to career education tailored to a specific target group, how to establish a school career education team and what role such a team plays in implementing a program, how to develop and use community-based resources, and how to maximize the effectiveness of career resource speakers and field trips.

The need for and ways to develop a school plan for career education were presented, along with suggestions on how to implement the program within a school with limited budgetary resources.

The presentation also described and compared the initial steps that can be taken in staff development, such as in-service courses, full-day workshops, after-school sessions, and summer staff development sessions.

Details were given on how to assess the needs of schools and districts before implementing a career education program, and on the development of career instructional and resource materials to meet a district's specific needs.

Session 549
Implementing Career Education (Grades K-12)

Mrs. Juanita O. Ward, Project Director, The Center for Career and Occupational Education, New York, N.Y., in a session on Implementing Career Education: K-12.

Columbia Program Tells 'How to Succeed in Career Education by Really Trying'

The Columbia, South Carolina Richland School District Two has delineated 11 objectives regarding "how to succeed in career education by really trying":

1. Learn all you can about career education and how other schools are involved in it
2. Assess your own district's needs for career education
3. Decide *if* your district is going to be involved and *why*
4. Define career education as it will be in your district
5. Define everyone's role in career education—who is to be involved and how
6. Develop a process for classroom implementation
7. Provide in-service training and ongoing assistance
8. Provide related student services—career information, community exploration, job placement, etc.
9. Plan ways to involve your community
10. Assess your program regularly; revise and expand it as needed
11. Promote your program with students, administrators, teachers, counselors, parents, and the community.

Goals and objectives were discussed, as were practical details involving workshop scheduling and agendas, student questionnaires, procedures for using community resources, etc.

Session 551
Career Education Practices: Small City Settings

Bear Creek School Relates Career Education to Many Facets of Curriculum

The Bear Creek Elementary School in Boulder, Colorado relates career education to many facets of the curriculum.

Science units include growing things, using tools and machines, and performing simple tasks such as making flour from wheat or churning butter.

Music, art, and drama help in focusing on training necessary for workers in television, movie-making, and the arts. In art, such creative activities as pottery-making and weaving are utilized.

In language arts, activities include reading, writing, role playing, and self-expression. Many skills learned through recording experiments, making charts, giving directions, writing thank-you notes, making scrapbooks of related products, and illustrating a process all become language arts experiences. Reading is used as students perform research in learning about occupations.

In mathematics, the child can manipulate raw materials to learn mathematical concepts. Teaching

aids for learning math skills such as fraction charts, placement pockets, abacuses, and counting discs are used. Many hands-on types of construction activities involving measuring are done.

A career development program in grade three focuses on the expanding community with emphasis on the expansion of our country and specifically the State of Colorado and its major industries and resources.

Session 605
Career Education Practices: Upper Primary Grades

Alabama Teacher Cites Activities to Infuse Career Education Into Secondary English

A teacher from Arab High School, Arab, Alabama listed a variety of career education activities which could be implemented in the secondary English classroom.

Examples of such activities include:

1. Prepare bulletin boards to show jobs needing communication skills
2. Prepare a publication such as a newsletter
3. View a film about careers in publishing
4. Listen to a tape about journalism careers
5. Record a simulated radio broadcast
6. Attend a lecture by a local business person
7. View a demonstration of equipment used in a specific occupation, such as stage lighting equipment at a local theater
8. Prepare a log describing occupational roles as portrayed in various television programs
9. Visit a State Employment Office
10. Attend a local political rally to emphasize public relations and speaking skills
11. Review newspaper employment advertisements for selected jobs
12. Prepare personal resumes for use in applying for summer jobs
13. Complete an application for a hypothetical job
14. Solve word puzzles—e.g., unscramble anagrams related to journalism
15. Produce a skit related to an occupation
16. Write business letters to request information about a selected career
17. Interview a person concerning his/her chosen career
18. Arrange a panel discussion to discuss factors influencing career choices
19. Make a persuasive speech selling a given product to the class
20. Compose a poem about your idea of work.

It was noted that infusing career education into a comprehensive curriculum begins with the development of a structured unit which typically consists of subject matter concepts to be incorporated into career education activities; general career education objectives; a pre-test designed to measure current student levels of those skills to be taught within the unit; individual lessons consisting of behavioral objectives written in measurable terms, teacher activities, suggested student activities, and materials and resources for the accomplishment of lesson objectives; an appendix of suggested supplemental resources; a post-test designed to measure the degree of improvement over pre-test scores; and a table for recording pre-test and post-test results.

Session 607
The Secondary English Teacher in Career Education

Ohio Staff Discusses Career Education as Integral Part of Vocational Agriculture

Staff from the Mad River Green Local School District, Springfield, Ohio, stated that vocational agricultural education begins in kindergarten and continues throughout life. The program includes those who are considering why and where people work, those preparing for employment, and those who are presently employed in one of the many agricultural occupations.

Agriculture education encompasses agri-business, natural resources, and environmental management. The wide range of employment opportunities at all occupational levels, the position of agriculture education as one of the major career occupation clusters, and methods of preparing for agricultural and related employment were discussed.

The fact that vocational agriculture requires skills in basic communications, mathematics, and decision-making as well as a working knowledge of history, science, and economics was also stressed.

Session 608
The Vocational Agriculture Teacher in Career Education

Omaha Program Focuses on World of Work and Character Development

The Omaha, Nebraska Public Schools have a career education program for grades K-12 which focuses on two major components: the world of work and character development.

Organization of the world of work concepts provides a systematic plan to introduce children to all types of careers and skills associated with these careers. Character development offers awareness of self-appreciation, personal attitudes, and decision-making skills.

For each world of work awareness goal, as well as for each character development concept, a sample lesson plan was developed to help the teacher at that grade level introduce the concept into the classroom.

Some examples of programs used by the Omaha Public Schools to implement the total program include:

1. Learning resource centers for health occupations for all fifth grade students
2. A program coordinated by the University of Nebraska Medical Center and Creighton University to bring an awareness of health field opportunities to all ninth grade students
3. Involvement with the Nebraska Restaurant Association
4. A movable "box-material" library project
5. Career counseling by Western Electric staff
6. Second and third grade mini-learning centers
7. Involvement with the Omaha Police Department for careers in law enforcement (program for second, fourth, and eighth grades and senior high)
8. An agri-business project for fourth grade students

Session 609
Career Education Practices: Large Urban K-12 Settings

Arkansas Program Implements World-of-Work Economic Education

The Fort Smith, Arkansas Public Schools offer a case study of the implementation of world-of-work economic education. Since 1969, Fort Smith has enrolled all eighth grade students (approximately 1,000 per year) in a semester world-of-work economic education program every year.

The social studies teachers in Fort Smith junior high schools have used the *Manpower and Economic Education* materials by Robert L. Darcy and Phillip E. Powell as the basic text for this program. They have supplemented these materials with other publications available from State and national governmental agencies and other organizations and have made use of a wide range of teaching strategies involving role playing, games, and simulations, audio-visual presentations, field trips, guest resource people, and hands-on activities.

World-of-work economic education approaches the economic process from the viewpoint of the individual in his dual capacity as manpower and man, human resource and human being.

The dual purpose of world-of-work economic education is man-

Presenters (in foreground) in a session on The Secondary Social Studies Teacher in Career Education included Mrs. Margaret Thompson, Eighth Grade Social Studies Teacher, Fort Smith Public Schools, Fort Smith, Arkansas, and Mr. Phillip E. Powell, Coordinator, Economic, Environmental, and Conservation Education, State of Arkansas Department of Education, Little Rock, Arkansas.

power development (acquisition of functional skills and attitudes) to help prepare young people for effective participation in economic life, and manpower understanding to help them comprehend the socio-economic environment and qualify as change agents to improve the work system and enhance the quality of American life.

Social studies is seen as borrowing the ideas of a systematic study of the world of work from world-of-work economic education to play a major role in influencing the rationale, goals, content, and implementation of career education.

Session 610
The Secondary Social Studies Teacher in Career Education

University of Arizona Augments Career Education Implementation

The University of Arizona's College of Education career education project was initiated with State funding in 1973-74, in an effort to meet the specific career education needs impacting upon teacher education institutions.

The project has attempted to augment career education implementation for grades K-12 in Arizona; to develop an awareness in teacher trainees of the philosophy behind career education, materials available for career education integration, and techniques necessary to present such materials in the classroom; and to assist teacher trainees in incorporating career education into existing school curricula.

The presentation included demonstrations, explanations, and handout materials used in integrating career education practices into existing teacher training courses in the College of Education at the University of Arizona.

Session 611
Career Education Practices in Teacher Education Institutions

Lincoln Initiates Career Education Planning Guidance Activities

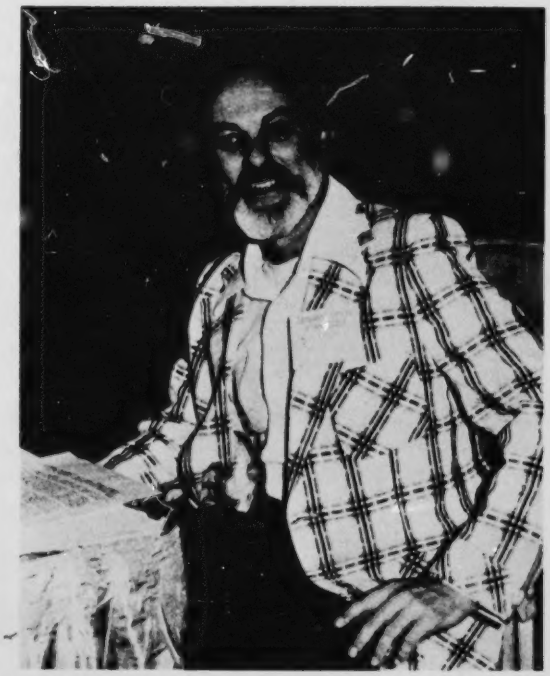
Based on results of a year-long study recommending institution of a new guidance program, the Lincoln, Nebraska Public Schools have initiated a new goal-centered, objective-based, K-12 career education guidance program.

Each of the four components (self, work, resources, and planning) has one specific concrete product; subordinate objectives are optional, allowing for flexibility in various delivery systems.

Objectives for the overall program are that, using data about self, the world of work, and the educational and training experiences available, each student will (using a rational decision-making process) construct a personal career development plan which includes the following elements:

1. A description of his/her interests, values, skills, and aptitudes
2. A tentative choice of job or career area appropriate for the degree of present firmness about the career decision
3. A list of appropriate short- and long-range steps for refining the career decision and preparing the student for a tentative chosen job or career area
4. A 12-quarter or 6-semester high school plan, including appropriate career preparation experiences, correlated to the analysis of self and career choice and completed near the end of the tenth grade learning sequence

Session 614
The Secondary School Counselor in Career Education



Mr. Carl Spencer, Director, Career Education Project, Lincoln, Nebraska, in a session on The Secondary School Counselor in Career Education.

Orange County Adopts Systematic Management Models

The Orange County, California Consortium has adopted two system designs which can be used to implant career education into a local education agency: one for a district effort and one for an individual school site.

The district model design is composed of three parts, each reflecting planning stages, decision points, and milestones to be reached throughout the total effort within a specified time frame.

Part I begins with the establishment of the district's goals for the career education effort and the formulation of a district plan of action. Steps for review, evaluation, modification, and approval are sequential and necessary considerations within the design.

Part II includes preliminary phases prior to implementation, such as the naming of an advisory committee, considerations of program and evaluation consultants, selection of a district level administrator to manage the program, establishment of a steering committee, development of an operational and implementation plan, selection of target schools for the career education effort, orientation of principals and administrative staff, and teacher in-service training and parent orientation.

Part III, program and management plan implementation, consists of the establishment of external consultants for program design and evaluation, development of an operational management plan, and development of a program plan.

At the local school level, a management model by collaboration has proven to be very effective in the Orange County Consortium. This involves steps such as performing an action commitment; determining the feasibility of all possible action plans; selecting, designing, improving, and producing the most feasible plan; implementing the plan; and evaluating and revising it.

Active participation by staff members in the total process of assessment, designing a plan of action, and implementing career education in the local school is a necessity. Therefore, any effective district or local school site program planning model should reflect a systematic functional flow design in order to ensure cost-effectiveness and maximum use of personal resources.

Session 622
Systematic Management of Career Education Programs

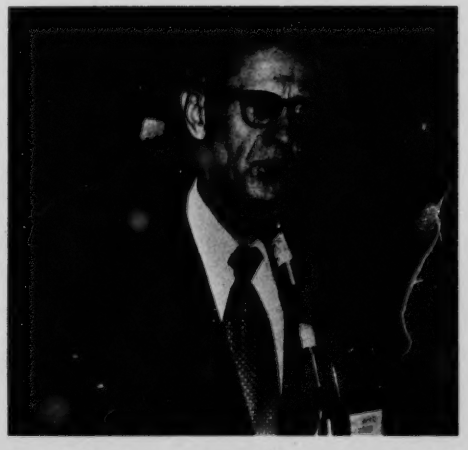
Chambers of Commerce Play Varied, Active Part in Career Education

This session featured presentations by representatives of several Chambers of Commerce on Chamber-sponsored career education programs.

The Chicago Association of Commerce and Industry has established a separate foundation (nonprofit) for its educational programs, which include a career guidance institute for Chicago school counselors, partnership in a scholarship fair for students, an executive high school internship program, data resource banks, and cooperative education programs.

The Joliet, Illinois Chamber of Commerce is working with the Joliet Public Schools District No. 86 on PROJECT JOLIET (Job Orientation Linking Industry and Education for Today). Career awareness and exploration are emphasized in the program, which provides concrete examples of how school activities are preparation for life's work, hands-on experiences, expansion of the classroom into the community, explanation of the importance of the "3 R's," and role models and realistic exposure to available careers.

The Elk Grove, Illinois Association of Industry and Commerce is cooperating with the Career Advisory Council of Elk Grove High School to sponsor a business-education awareness day for senior high school teachers and administrators. To date, a half-day workshop was held at various businesses which teachers and administrators visited. Future plans call for a



Mr. Ralph Springer, Director, Urban Affairs Division, Chicago Association of Commerce and Industry, Chicago, Illinois, makes a point in a session on The Chamber of Commerce in Career Education.

half-day session hosted by teachers to provide participating business people with exposure to current educational problems and procedures.

The Houston, Texas Chamber of Commerce Education Committee raised money for production costs of a series of radio and television spots on opportunities in vocational-technical education in Houston area schools. Members of the committee serve on the State Board of Education's Advisory Committee on Personnel Exchange and encourage the participation of business establishments in planning exchange opportunities for teachers. They have assisted with preparation of brochures on the advantages to employers of cooperative education programs and have worked with the schools in many other areas such as a job fair for high school students, junior achievement, executive internship programs, career education events sponsored by industry, and work study programs.

Session 627
The Chamber of Commerce in Career Education

Russellville Program Develops Industry-Education-Labor Cooperation

In Russellville, Arkansas, the career education program is based on implementation of a series of steps designed to develop industry-education-labor cooperation and collaboration. These include:

1. Media coverage on the goals of career education, stressing the need for involvement by the industry-business-labor professional communities
2. Visits by educators to businesses, industries, and service agencies to assist with areas such as developing a placement service, establishing a career learning tape library, identifying learning trip possibilities, and establishing a list of resource people
3. In-service activities for teachers, counselors, and administrators
4. Formation of career education advisory committees to help with in-service activities for educators, curriculum planning, community liaison, and development of a resource people file.

Session 629
Involving the Business Community in Career Education

Georgia Special Needs Program Maximizes Career Opportunities for Handicapped

The Georgia Special Needs Program is a cooperative effort between students, parents, schools, business, and industry to maximize career development opportunities for the handicapped learner.

The program focuses on determining career objectives; developing personalized instruction programs; providing appropriate career awareness, orientation, and skill development opportunities; developing career decision-making skills; and providing student monitoring, placement, and follow-up activities.

A combination of school-community resources are used, including in-school adapted vocational education training laboratories, specialized community-business services, parent groups, and various specialists in the educational fields.

The program operates primarily in schools designated by the Georgia State Board of Education as comprehensive high schools. Employed in each of the 26 schools offering the program are specialists trained in interdisciplinary, special, and vocational education. The specialists follow a prescribed procedure in developing and implementing personalized programs for the handicapped learners enrolled in the program.

A comprehensive assessment is done to determine the functioning level, career interests, and areas of greatest occupational potential for the handicapped learner. Following this phase, a personalized instructional program is prescribed which includes career education, academic and vocational skill development, cooperative placement, and follow-up.

The specialists spend approximately two to three hours per day in small-group instructional settings focusing primarily on career development activities, career decision-making skills, and basic remedial skill development.

Each specialist handles a case load of approximately 25 students with varying handicapping conditions.

Students generally remain in the program throughout high school or until achievement of a satisfactory adjustment has been reached within the school environment.

Session 630
Career Education Practices in Special Education

Linganore Program Provides Career Choice Support for Students

Linganore Junior-Senior High School, Frederick, Maryland, is a comprehensive school which, in addition to academic courses, offers industrial arts or vocational training in drafting, metalwork, woodworking, home economics, business education, electricity/electronics, auto body work, building trades, and agriculture.

A career education continuum has been developed cooperatively by faculty members, with key units developed by the guidance and English departments and overall direction for the program provided by the faculty guidance advisory committee.

In seventh grade, each student is enrolled in a career exploration class, receives an orientation to the career information center, and begins to investigate at least one career related to each course taken.

In eighth grade, students rotate through ten career classes during the year, explore at least one career related to each class taken, and complete a unit on decision-making and apply it to a senior high course of study.

Students' aptitudes are assessed in ninth grade and each student completes a Self-Directed Search or JOB-O unit as part of the English program.

In the tenth grade, students exercise specific course selection in preparation for planned careers. During English Counseling Weeks they refine decisions made in previous years.

"So You Want A Job," a semester-long mini-unit, is a recommended English course for all eleventh grade students. Course emphasis is on job-finding skills applicable to a wide variety of occupations. Eleventh graders also have the option of participating in the executive internship and job visit programs as ways to try new careers.

Seniors may also elect to participate in executive internship or job visit programs. They may choose part-time employment through the work study program as an alternative to in-school training. Each senior also has thorough interviews with the counseling staff emphasizing the importance of making relevant decisions regarding future plans.

Session 634
Career Education Practices: High School

Texas Teacher Shows How to Organize Classroom for World of Work

The Organize Your Classroom For the World of Work program, developed by an educational consultant and former teacher from Richardson, Texas, demonstrates how a teacher can convert the classroom into a company, complete with job descriptions and management policies.

Based on the idea that most of a teacher's routine tasks can be converted into "jobs" within a classroom, the program allows students to perform these jobs and thereby learn responsibility, autonomy, the value of work, respect for others, and the joy of achievement.

Some of the jobs suggested for the classroom company include attendance supervisor, file clerk, time card manufacturer, area manager, materials manager, audio-visual technician, public relations manager, and credit union clerk.

The duties of each of these and special qualifications needed by each employee are described in writing.

Management policies for the classroom company set up regulations for punching a time clock, care of tools and equipment, dress codes, etc. The policies also give guidelines for pay scales, overtime pay, bonuses, and suggestions for "paying" the workers.

Not only does a worker's pay check provide incentive, but so do the fringe benefits of the classroom company. Coffee breaks, paid holidays and sick days, office parties, and "Employee of the Week" awards are suggested as other motivational techniques.

In this structure a student is expected to respect his/her boss, get along with coworkers, and produce quality work. Through this simulation, young people are made aware of some of the real problems and situations of the world of work and are forced to deal with them in a sheltered situation.

Session 635
Simulation Techniques for Career Education

Ms. Roxy Smarzik, Education Consultant, Region X Education Service Center, Richardson, Texas, in a session on Simulation Techniques for Career Education.

Los Angeles Provides Career-Oriented Field Trips for Students

The first speaker in this session was a representative from the Bank of America who focused on field trips for seventh to ninth graders from the industry participation and sponsorship point of view. This discussion provided an overview of the positive influence private industry can and does have on the junior high school career education program. Also discussed were hints appropriate for school personnel concerning techniques which might be utilized when seeking company sponsorship and participation.

The following guidelines relate to conducting Bank of America-sponsored career education study trips for students of the Los Angeles City Unified School District. In general, the sponsor provides the budget and selects the community and/or school, while educators select student participants and provide career instruction and program evaluation. Sponsors and educators generally cooperate to provide volunteers, program coordinators, and resource personnel for tours, and they select and coordinate the program with vocational resource sites and personnel.

The second part of the presentation focused on a career-oriented field trip program sponsored by the Los Angeles City Schools, Los Angeles Area Chamber of Commerce, and Los Angeles Catholic Archdiocese.

This program provides career field trip experiences for over 12,000 students per year in 80 different employment sites.

The advantages and disadvantages of two types of career field trips (the exposition type and the on-site type) and procedures involved with the development and follow-through of next year's program utilizing management milestones were discussed.

Session 637
Career Education and the Field Trip (Grades 7-12)

Development and Maintenance of Career Education Resource Centers is Discussed

A representative from the Richardson, Texas Independent School District addressed the subject of developing and maintaining career education resource centers.

One of the first considerations is to decide what purposes the resource center is to serve, since the purposes as well as available funds and facilities will determine the magnitude of the resource center. A few of the purposes could be to serve as a materials center, to provide a resource room for students, to aid teachers in developing classroom activities, to secure resource people, to develop community resource files, to arrange field trips, and to provide in-service programs for teachers.

Next, the type of center to be developed can be determined. For example, questions can be addressed such as whether the center will serve the entire school district or each school will have its own center, where the center will be located, and whether a room will be designated for it or it will be located in the library.

The types of materials to be included, the people who will supervise the center, and decisions as to new materials needed are also important, as are furniture and equipment needs, staffing, and components of the center.

It is advisable to have various forms printed for materials requests, evaluation of materials, development of classroom activities, guidelines for using the center, etc.

It is also important that arrangements be made for renewals and updating services so that only current, valid information is used in the center.

Session 638
Career Education Resource Centers (Grades K-12)

Value of Teacher-Made Materials is Touted

A media specialist from Warrensburg, Missouri discussed the pros and cons of commercial versus teacher-made materials.

The teacher is faced with the question, "Why make them if they can be bought, as shelves of commercially produced material are readily available. If he/she can find the exact materials needed and meet objectives by buying an item, then commercially prepared materials should be used. However, often teachers find that commercial products are too general and not able to meet the specific needs of the group.

In such cases, very attractive and effective materials can be made by teachers. They can create products which are highly specific in nature and bring in timely events. Also, teacher-made kits can be easily revised

Representatives from Puerto Rico at their caucus session.

if the teacher needs to alter or adapt the instruction in them. The teacher is able to capitalize on available items in surroundings to which the children can relate.

Television can be used if the facilities are available. Simple books and audio tapes, along with games and bulletin boards, are some items that can be made. Films, filmstrips, and slide-tape presentations can be produced if the teacher has the expertise and equipment necessary.

Each project must be carefully planned. There must be a need; objectives must be clearly and behaviorally stated; a content outline suitable for a particular group must be drafted, storyboarded, scripted, and finally assembled to produce a smoothly flowing learning package.

Session 641
Teacher-Made Materials

Portland Program Implements EBCE in Rural/Suburban Setting

Panelists from Portland, Connecticut discussed their process for implementing an Experience-Based Career Education (EBCE) program in a rural/suburban setting.

First it was necessary to gain Board of Education support, and this involved providing an orientation to the EBCE concept and performing a feasibility study. Next, community support was sought and the proposal was developed.

The mechanics of implementation included student and parent orientation and staff orientation and training.

The academic delivery system was developed, including the student program guide, the student career guide, the course selection process, and the activity sheet.

The site analysis process involved developing initial contacts, providing orientation for resource people, and preparing the learning guide.

Future plans, including demonstration/training and regionalization, were also discussed.

Session 642
Experience-Based Career Education

Florida VIEW Program Provides Supplemental Career Information to Schools

In Chipley, Florida, a program known as VIEW (Vital Information for Education and Work) provides supplemental career information to schools, Statewide.

VIEW provides current information (never more than 12 to 16 months old) about 485 careers and nonbaccalaureate occupations in Florida. This information was compiled after actual interviews were conducted with workers in the field.

The VIEW system uses microfilmed cards to disseminate this information according to two formats: the Career Card and the Local Training Opportunities Card.

The Career Card provides four pages of information about job characteristics, preparation, and training needed; job outlooks; economic returns from five areas of the State; usual working conditions; sources of additional information; and related career fields.

The Local Training Opportunities (LTO) Card was the result of a survey conducted by VIEW of every State-supported vocational-technical center, community college, and university as to career study opportunities matched against the 485 occupational titles found in the Career Cards. The LTO Card helps students determine which State-supported institutions have the training, programs, or courses they want, whether these are in their immediate region or elsewhere in the State.

Session 646
Using a Comprehensive Occupational Information System

Mr. William Woolley, Director, Florida VIEW (Vital Information for Education and Work), Chipley, Florida, in a session on Using a Comprehensive Occupational Information System.

Salinas Program Uses Community Experiences to Supplement School Programs

The Salinas, California Union High School District, using community-based experiences as a supplement to school programs, is assisting students to become more knowledgeable about the world of work.

Teachers involved in the programs try to include as many community-based experiences as possible. These vary from program to program, but generally constitute about one-third of the course.

School coordinators in both work experience and career education spend a large percentage of their time with the business community in assisting classroom teachers in placement, identification of community classroom sites, and securing resource people to speak at school.

Advisory committees for each program include community representation. Through feedback and follow-up studies, curricula and courses are constantly reevaluated, updated, changed, or dropped, and new ones are added as the demands of the community and technology change.

Other community involvement includes special exploratory programs sponsored by the Industrial Education Council and others, involvement of the local Chamber of Commerce, and teacher participation in the economic community.

Session 647
Career Education and Experiential Education

Free Enterprise System Seen as Bedrock of Political Freedom

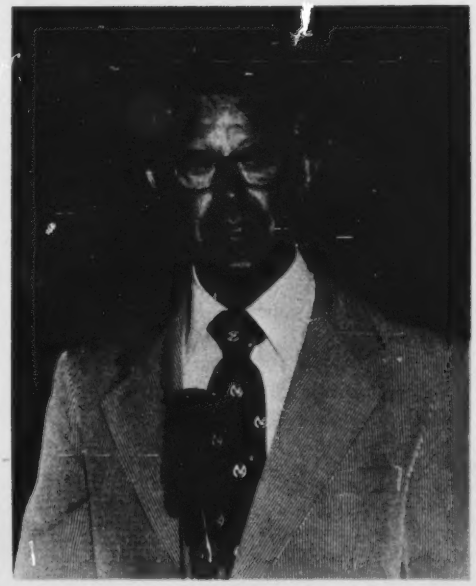
The Manager of Community Relations for the Irvine Company, Newport Beach, California, stressed the importance of the American economic system of free enterprise as the foundation of our political freedom.

After a discussion of the history of the free enterprise movement, attempts to provide opportunities for economic education on a national scale were described. These included efforts of the Joint Council on Economic Education; a film developed by World Research, Inc. on American political and economic freedom; audio-visual presentations and teacher guides prepared by the U.S. Chamber of Commerce; an advertising campaign by The Advertising Council against the nation's "economic illiteracy"; a booklet entitled *The American Economic System and Your Part In It;* and efforts of businessmen through Junior Achievement, occupational programs, career days programs, etc.

Simulation programs (such as the one designed by staff of the Center for Economic Education at the University of California at Los Angeles wherein each classroom is a self-contained economic universe) were also discussed.

Information was provided on intern programs for high school and college students sponsored by the Irvine Company in planning, governmental relations, and practical on-the-job training in land development and management. The Irvine Company-sponsored program to expose high school students to the process of planning for the new city of Irvine, California was also discussed.

The Orange County Industry-Education Council also alternates programs to include plant tours and talks by business executives with presentations by local faculty explaining new methods of career education.



Mr. Michael L. Manahan, Manager of Community Relations, The Irvine Company, Orange County, California, in a session on Career Education and the Free Enterprise Movement.

Session 648
Career Education and the Free Enterprise Movement

Akron Second Graders Face 'Life in the Real World'

"Life in the Real World" was a second grade economics unit used in the Akron, Ohio Public Schools to simulate various economic situations encountered in adult life.

The unit provided students with a basic understanding of banking and the importance of a savings program as well as a wide range of economic concepts and terms. From this basis, second graders created a model economic society within their classroom, involving activities such as applying for jobs at home and at school; applying for car, home, and vacation loans and making weekly payments on these loans; designing and following a weekly budget; comparative shopping at a grocery store; and operating a business.

Students established their own standards of living as they selected homes, cars, clothing, and food. Each student had a weekly "work contract," listing school and home jobs for which he/she received a weekly "pay check." Students also received weekly bills.

The School Bank and Savings and Loan, operated by student bank tellers and loan officers, processed savings deposits and other payments and determined which classmates should receive bank loans. The second graders could spend any extra money on student-produced boutique and food items sold in the class stores. Jobs from bank tellers to store clerks were rotated weekly so each child had an opportunity to gain a variety of career experiences.

Group activities were enhanced through classroom programs in reading, math, health, social studies, and language arts. New learning concepts were reinforced with individualized learning activities and games.

Session 706
Career Education Practices: Early Primary Grades

Parsippany Program Tells How to Implement Career Education in Existing Curriculum

A representative from the Parsippany, New Jersey Educational Resource Center presented information about how to implement career education in existing curriculum as well as information about the local Introduction to Vocations program.

The presentation focused on career exploration concepts at the middle school level. Emphasis was placed on infusion of the occupational cluster concept into the various disciplines within the existing curriculum.

Basic and effective "how to" hints regarding staff development were also stressed, and information regarding the implementation and use of a mobile resource center for an Introduction to Vocations program was presented.

Session 709
Career Education Practices: Middle/Junior High School

Albany Students Afforded Career Exploratory Experience

Junior and senior high school students in Albany, Minnesota are being offered career exploratory experiences as part of the Career Ventures in Vocational Education Project for K-12 students.

Following career exploration in junior and early senior high and discussions about their career interests with their counselors, students are referred to the career ventures coordinators, who set up career exploratory experiences for students to observe and explore a wide variety of occupations. The exploratory experience generally lasts from one to five days and is followed up by discussion with counselors and coordinators for the project as well as student and business evaluations of the experience.

Mr. James Clark, Director of Career Education, Parsippany Public Schools, Parsippany, New Jersey, uses visual aids in a session on Career Education Practices: Middle/Junior High School.

Assistance is provided to the program by more than 175 local businesses and library-media personnel from the three participating school districts. Resource information and materials are available from the libraries of instructional materials centers housed in district parochial and public schools. Most of the high school material purchased is housed in a central location at one of the schools and disseminated upon student request.

A guidance information system is also available to give students an opportunity to explore in-depth the careers on the Computer Consortium system.

Session 710
Career Education Practices: High School

Georgia English and Social Studies Teachers Work Jointly for Career Education

In Hamilton, Georgia, an English teacher has become involved in a team effort with a social studies instructor to develop courses teaching skills that students can use in their careers.

Through the Senior Personalized Instruction Laboratory (SPIL) program, students have had an opportunity to prepare a taped narration and slide presentation on Harris County's history; publish a local history magazine, *Folk and Kinfolk of Harris County;* participate in various projects such as a junior naturalist program at a nearby garden; and become involved in various publicity efforts such as speaking at conferences, appearing on local television programs, writing newspaper articles, planning sales campaigns for magazines, and giving the slide presentation to interested groups.

Through these experiences students learned all the phases of preparing a book, such as gathering information; writing, editing, and rewriting articles; sketching historical sites; photographing subjects; typing; layout; participating in sales and publicity campaigns; keeping financial records of sales; and supplying businesses and interested people with books. They also learned skills in using various pieces of audio-visual equipment, narration, gathering and indexing data, and public speaking.

In preparing the slide presentation and the magazines, students learned about certain businesses and job opportunities within the county which have played important parts in the development of the county's economy.

Session 712
The Secondary English Teacher in Career Education

Florida State University Creates Career Development Specialty

A new specialty has been initiated by Florida State University in an interdisciplinary effort to create a new professional, the Career Development Specialist (CDS).

As a result of a study performed in 1973 by a 15-member task force regarding problems in the conceptualization and delivery of career development services, the task force (in conjunction with other professionals in the field) identified general goals and specific competencies for both a CDS I (Master's degree level) and CDS II (Bachelor's degree level).

In early 1974, the task force recommended to the College of Education that a new program be created which would be separate from counselor education, and in the fall of 1974 the decision was made to move ahead on a limited basis with CDS I training.

A special curriculum was designed for CDS and field placements were made for practicum and internship.

To date, six graduate students have completed CDS training and approximately the same number of students are currently enrolled in the program.

It has been found that CDS trainees need to be proficient in basic counseling skills, they need to be able to understand and provide leadership at the systems level, and they need to be able to work in a comprehensive career education program in order to develop special skills, identify professional interests, and experience a variety of client service needs.

The Curricular Career Information Service (CCIS) at Florida State University has provided a multilevel, multifaceted training center for CDS trainees. An analysis of desired training outcomes for the CDS (competencies) reveals that almost all can be mastered through internship training in CCIS.

Session 716
The Counselor Educator in Career Education

Wisconsin Staff Share Ideas on Systematic Management of Career Education Programs

Oregon, Wisconsin School District personnel believe that in order to achieve the goal of systematic management, it is necessary to conceptualize model goals into a set of developmental concepts which become the guidelines for curriculum building.

Following a presentation of the developmental concepts used by the Oregon School District, staff development strategies were discussed, including the use of local, State, and Federal funds for in-service; development of staff interest; organization of summer workshops; and the use of resource people.

After the importance of community interest and home involvement was discussed, Oregon staff described the development of a local community resource guide. Resource guide development involved contact with: business and/or industry representatives for job placement and information/visiting resources; parents as both volunteers and information resources; and teachers and administrators as resources.

Student involvement factors were also discussed, including sample program ideas designed to stimulate and maintain student interest in careers and assessment procedures designed to measure the level of student interest and involvement.

Session 721
Systematic Management of Career Education Programs

Minnesota Presenters Describe Interdisciplinary Programs of Career Resource Centers

In the first portion of a three-part session, the three interrelated programs comprising the Hosterman Junior High School, New Hope, Minnesota, career education program were described.

At this school, pupil potential laboratories attempt to help students discover their potential. A directory of almost all working adults in the building has been published and includes the numerous jobs the staff has held, both in and out of the school setting, as well as hobbies and interests of these people. Students are provided with a "Myself" form that serves as an entree to the person with whom they wish to discuss an occupation, a hobby, or a personal problem.

Seventh grade units at Hosterman develop the concept of the family model and involve family communication, sociology, values, and decision-making. These are followed by eighth grade units based on the home model in which interdisciplinary activities are centered around the construction of a home. In ninth grade an interdisciplinary simulation wherein each student plays a role in the community is used to teach process understanding and skill objectives. Another phase of Hosterman's program is the career resource center, containing materials related to job exploration and job clusters.

As the second part of this session, the Coordinator of Career Resource Centers for South Washington County, Minnesota schools described the goals in establishing and operating a career education resource center and discussed procedures for developing the center.

The third part of the session consisted of a presentation by the Work Experience/Career Exploration Program Coordinator, Northfield, Minnesota Public Schools. This presentation examined ways to equip students with information and coping skills essential for responsible decision-making and career planning. The specific model of a work experience/career exploration program for disadvantaged ninth graders was used to illustrate how particular career management tasks can be facilitated through the expanded use of a resource center. In addition, various approaches for working with the "turned off, tuned out" secondary students were presented.

Session 723
Staff Development Practices and Programs in Career Education

Industry-Education Councils Establish Education-Work Partnerships

Representatives of one local and two State industry-education councils discussed their activities during this session.

The Associate Director for Career Planning and Continuing Education, Woodbridge Township School District, New Jersey, discussed how an industry-education council has brought programs relating to career education into reality in his township.

The activities and results of the Arizona Business-Industry-Education Council were also discussed, as were the development, accomplishments to date, and goals for the future of the Industry-Education Council of California.

The history of formation of the Industry-Education Councils of America was briefly described, and basic concepts of industry-education councils as true partnerships between the world of work and education were stressed.

According to presenters, indus-

try-education councils strive to establish realistic dialogues between those concerned with local educational and industry problems, to seek knowledge of what has been accomplished in other areas, to adopt or adapt existing programs when possible to help solve their own problems, or to develop new approaches to solve their own local problems. They try not to reinvent the wheel, and, when asked, exchange their experiences with others so the greatest benefit can result from their own experiences.

Session 726
Industry-Education Councils in Career Education

Mr. Bernard Novick (seated at left), Associate Director, Career Planning and Continuing Education, Woodbridge Township School District, Woodbridge, N.Y.; Mr. Robert Stewart, President, Arizona Business-Industry-Education Council, Mesa, Arizona; and Mr. Donald Krotz, State and National Director, Industry-Education Councils of America, Orinda, California, in a session on Industry-Education Councils in Career Education.

Study Cites Most Effective Ways to Provide Career Education for Gifted and Talented

A report of a study of opinions and practices regarding career education for exceptionally gifted and talented students indicates that the most effective practices feature: independent learning; flexibility in scheduling and assignments; extensive use of community settings and field resource people; greater in-depth experiences than those provided most students; hands-on experiences; cooperative planning involving students, parents, teachers, and resource people; planned and sequenced, rather than random, experiences; considerable student assumption of responsibility for learning; individualized instruction and counseling; and special career reports, field trips, and career days.

The study, concerned with the career education provided exceptionally gifted and talented students in Illinois, was exploratory and adhered to the descriptive survey method. Review of related literature, reports, and opinions of knowledgeable educators also indicate that:

1. Current programs for differentiated career education experiences for exceptionally gifted and talented students are few in number and tend to be isolated throughout the U.S.
2. Those exceptionally gifted and talented students in Illinois who participate in career education activities generally do so as part of programs and practices offered to *all* students. Very few differentiated career education programs and practices are provided for these students.
3. The interaction between those educators primarily concerned with career education and those primarily concerned with educating the exceptionally gifted and talented students is insufficient to achieve cooperative programs or an integration of their efforts.

Session 730
Career Education: The Gifted and Talented

New Yorkers listen intently at their State caucus.

Illinois Funds Demonstration Sites for Career Education for Disadvantaged and Handicapped

The Division of Adult, Vocational, and Technical Education (DAVTE), in Illinois has provided funds to local education agencies for the development of secondary and post-secondary career education programs.

Nine sites were funded to serve as resource centers demonstrating effective methods and procedures for providing career education to disadvantaged and handicapped students throughout the State.

DAVTE provided in-service education activities to all project personnel regarding competencies necessary for administering special needs programs. State consultants cooperated with the project directors to develop student activities in the areas of career awareness, self-knowledge, job survival skills, and attitude development.

One such demonstration program is located in the Sauk Area Career Center, Robbins, Illinois, which is a 2-year vocational school for high school juniors and seniors and serves three high school districts. The center offers career exploration activities to disadvantaged students beginning at the freshman level. The results of vocational evaluation activities are combined with career interests to assist students in selecting a vocational training program. Individual objectives are prepared to meet student needs. A special needs team works with the vocational teachers to modify the curriculum; adapt teaching techniques; and provide tutoring, career guidance, and counseling as necessary. Pre-employment activities are taught to assist students in preparing for job placement.

At Tilden High School in Chicago, counselors, departmental teachers, and vocational staff members provide cooperative instructional planning and tutoring for handicapped vocational education students. Occupationally related reading, math, and bilingual tutoring (some done by peers) are available to disadvantaged students. Counseling services and the use of the library as a career information resource center also contribute to the program.

Session 731
Career Education for the Economically Disadvantaged

'Bread and Butterflies' Infused Into Iowa Elementary Curriculum

The "Bread and Butterflies" television career development series has been infused into the curriculum of the fourth, fifth, and sixth grades in all schools in Iowa.

The State Educational Broadcasting Network was scheduled to provide the series over a 5-year time span, beginning in February 1974. To install this series, it was decided that the initial thrust would come from a 10-member State-level task force using an in-service workshop delivery effort Statewide. The workshop series was followed by teacher trainer sessions in State elementary schools. Next, the plan called for involvement of college/university personnel and those serving in the intermediate Area Education Agency units. It was expected that the series would come to the attention of people responsible for preparing educational personnel enrolled in pre-service teacher education programs.

The success of the in-service deliveries was evaluated by both formative and summative evaluation techniques. The evaluation demonstrated the effectiveness and success in installing/infusing career development/education into the curriculum at this grade level.

Participants have a working session on Simulation Techniques in Career Education.

Session 735
Curriculum-Infusion Approaches to Career Education (Grades K-12)

Simulation-Gaming Methods Applied to Michigan Career Education Model

The purpose of this session was to show how facets of the Michigan career education model can be taught by simulation-gaming methods. Attendees participated in a "labor-management" simulation game, received copies of others, and saw an early elementary career development game constructed.

Following a discussion of the Michigan model, some of the advantages of using simulation as an instructional technique for career education were cited.

Simulation deals with both content and feelings; issues and/or processes can be treated. Through simulation, a simplified representation of important aspects of a more complex real life situation is possible. Dynamic interaction consisting of decision-making and negotiation is strongly encouraged by employing the simulation-gaming technique.

Research reveals that use of simulation games generally results in high student interest, motivation, and involvement. Better comprehension of complex environments is promoted through this method.

It was pointed out that the nature of the interaction naturally varies, according to the maturity of the individuals participating in the simulation game, and that the last step should be debriefing (a series of questions allowing the instructor to focus, reinforce, and extend the intended learning).

Session 736
Simulation Techniques in Career Education

West Valley Houses Six-Pack of Career-Related Services and Programs

The West Valley Community College, Saratoga, California, traces the evolution of its career education concept to research and planning conducted by an internal ad hoc committee during 1975.

The committee worked closely with faculty and staff from diverse campus areas to establish the framework for a comprehensive career center which would house the necessary ingredients for an effective college-level career education program.

The 4,800-square-foot career center facility is located on the central hub of the campus and provides six elements for the delivery and support of career education: career studies, occupational and international work experience, student placement, a career resource library, career counseling, and work study programs.

Session 739
The Career Education Resource Center in Community Colleges

Participants Learn Methods for Using Newspapers to Teach Career Education Concepts

A career education specialist from Eugene, Oregon stressed the importance of the newspaper as a relevant, practical, up-to-date source of information from which we can learn about ourselves, others, and the world around us.

The session focused on the use of the newspaper to teach the following topics:

1. *Basic math and reading skill development.* Use the newspaper to read for the main idea, separate fact from opinion, identify persuasion techniques, compare prices, buy for a family, etc.
2. *Basic thinking, planning, organizing, and decision-making skills.* Use the newspaper to identify planning and problem-solving techniques used by leaders, to classify and categorize news and advertising content, to draw conclusions and make predictions about the development of events, to analyze editorial reasoning, and to research events related to current news.
3. *Self-awareness and awareness of others.* Use the newspaper to find reflections of feelings, thoughts, dreams, experiences, attitudes, and events that are a part of being human; to analyze success and failure patterns; to follow career development in a variety of stories on lifestyles; and to identify likes and dislikes in words, pictures, and cartoons.
4. *Job titles and tasks.* Use the newspaper to explore career titles, identify career opportunities, understand job requirements, compare job qualifications and benefits, understand how jobs are related, and recognize career skills common to various types of jobs.
5. *Consumer education/resource management.* Use the newspaper to analyze advertising appeals; to understand the role of business, government, and industry; to explore resources; to find ways to save and spend; and to identify money management methods.
6. *Comparative studies/in-depth research and reporting.* Use national newspapers to compare geographical similarities and differences, coverage and content, events and issues. Use international

newspapers to compare language usage and composition; use daily events to build histories and provide detail for in-depth study.

Session 740
Career Education Practices Using the Newspaper

Study Examines Rationale for Far West Lab EBCE Program

This session addressed a study to examine the rationale of the Far West Laboratory (San Francisco, California) Experience-Based Career Education (EBCE) program in terms of its support from empirical data and by various educational theories. Purposes of the study were: (1) to add knowledge concerning a major alternative program which can be used by professional educators to evaluate the merits of that program from their own point of view about education as well as from the data; and (2) to examine major assumptions about learning implicit in the model in order to focus further research.

The approach used consisted of:

1. Using program descriptions and documented procedures, derive assumptions concerning learning, instruction, and curriculum.
2. Organize and classify the derived assumptions. For this study, they were organized by (a) those related to learning objectives (their content and how chosen); (b) those related to entering behavior of students and how this is accounted for in EBCE; (c) those related to instructional procedures, including the teachers' and students' role and organization of instruction and curriculum; and (d) those related to performance assessment, including methods and procedures.
3. Review the literature for theoretical or empirical evidence that supported, contradicted, or was equivocable and summarized how EBCE fared.

The analysis indicated that (1) the Far West Lab EBCE model's assumptions represent a consistent and coherent approach to organizing for learning; and (2) most assumptions were both supported and contradicted—i.e., most of the accumulated empirical evidence leaves many issues unsettled.

Unresolved issues include how the content of learning is to be selected and organized for different kinds of learners and the extent to which student involvement in the selection of learning topics should take precedence over learning content organized by the teacher.

Session 741
Experience-Based Career Education

Rolla Program Uses Shadowing as Part of Career Exploration

In Rolla, Missouri, ninth grade students participate in 1-day career exploration visits to people with careers of interest to them.

After the counselor administers the OVIS test to determine interest areas and discusses the results with the students, the work experience coordinator holds orientation sessions with groups of 25-30 students and introduces students to the cluster concept.

Students are then given lists of careers available to shadow and discuss their shadowing choice with parents and counselor before being visited by the coordinator again.

On Career Exploration Cards students indicate three careers which they would like to shadow in order of preference. The cards are submitted to the coordinator, who makes the arrangements for the students' visits and sends the assignment to the students along with an information sheet, to be filled out by the students, concerning the career visited.

After the visit, the students return the information sheet and an evaluation of the visit. They are asked to share their experiences with classmates, so that all students can learn about as many careers as possible.

Session 742
Shadow Programs in Career Education

Texas Education Agency Develops Career Education Measurement Series

In 1972, the State Board of Education selected career education as a priority area of concern. Consequently, the Texas Education Agency established an Assessment of Career Education Steering Committee to work cooperatively with Partners in Career Education (a project sponsored by the Dallas and Fort Worth school districts and the education service centers in Region X and XI) to more clearly define what skills, capabilities, knowledge, and attitudes a 17-year-old student should possess. A Statewide survey utilizing a cross-section of Texas citizens was conducted resulting in 177 student outcomes for career education being rated as "basic" for all students. Approximately 500 test items were then developed jointly with Westinghouse Learning Corporation to measure the student outcomes. Following item tryouts and field testing, the Career Education Measurement Series (CEMS) was developed and used in a Statewide assessment during the fall of 1975.

CEMS is a criterion-referenced, diagnostic system designed to support instruction in career education. The instruments in the system represent a hierarchy of

400 test items, 63 basic learner outcomes, 26 subcategories, and 9 categories. In all, CEMS consists of: (1) a survey test, comprised of 45 items, designed to serve as a screening device to diagnose probable areas of strengths and weaknesses in either individuals or groups of students at the subcategory level, and (2) 16 category tests, comprised of 9 to 22 items, designed to provide specific diagnostic information about student performance in relation to the basic learner outcomes for career education.

In the fall of 1975, the CEMS survey test was administered to 20,073 ninth grade and 6,593 twelfth grade students. Each of the 16 category tests was also administered to approximately 700 ninth grade students throughout the State. The results of the Statewide assessment can be summarized as follows:

1. ***How did Texas students perform on the 26 subcategories measured by the survey test?***

   In all, more than one-half of the students met the performance criterion in 20 of the 26 subcategories on the survey test. Areas of *highest* performance were: attitudes toward work, understanding self-concept, and responsibilities within work environment. Areas of *lowest* performance were: job characteristics, interpersonal relationships, and job specialization and worker interdependence.

2. ***Were there significant differences in the performance of students of varying ethnicity, sex, and grade levels?***

   In general, the results indicate that the twelfth graders scored higher than the ninth graders, the female students scored higher than the male students, and the students classified as "other" scored higher than the "Mexican American" and "black" students respectively.

3. **Was the survey test an effective screening device for diagnosing student learning needs which require further investigation?**

   Results indicate that the survey test is useful as a diagnostic instrument to indicate areas where further measurement is needed.

4. ***How helpful is this kind of information for decision-making at both the student and program levels?***

   An evaluation questionnaire was sent to 351 teachers and counselors and 198 principals who participated in the Statewide assessment. Of those 168 teachers and counselors and 121 principals who responded, over 75 percent felt

Dr. Elvis Arterbury, Project Director, Partners in Career Education, Arlington, Texas, hands out materials in a session on Needs Assessment Procedures in Career Education.

Mr. Keith Cruse, Director of Assessment, Texas Education Agency, Austin, Texas, in a session on Needs Assessment Procedures in Career Education.

that the test results were: (1) useful for program planning, (2) most useful to vocational educators, (3) useful in counseling students, and (4) reported too late in the school year. Most of them felt that the career education concepts could be infused into the ongoing instructional programs in their schools.

Session 749
Needs Assessment Procedures in Career Education

National Survey on Status of Career Education Performed

In the last half of 1975 and early 1976, a survey was carried out for the National Advisory Council on Career Education and the U.S. Office of Education to present a comprehensive picture of the status of career education in the United States during the 1974-75 school year, with some projections for the 1975-76 school year.

The following abstract, taken from the report, summarizes highlights of the report, entitled *Career Education in the Public Schools–1974-75: A National Survey*, HEW Publications No. (OE) 76-00507, U.S. Government Printing Office, Washington, DC 20402, price: $4.00.

ABSTRACT

"In 1974, the Congress took a major initiative to respond to calls for educational reform by creating an Office of Career Education within the U.S. Office of Education and a National Advisory Council for Career Education. Congress appropriated $10 million to be used to fund projects nationwide aimed at the development of career education. In so doing, Congress also requested that the Commissioner of Education and the National Advisory Council for Career Education carry out a survey and assessment to determine the status of career education in 1974 and 1975, to provide a firm empirical basis for consideration of future legislation in career education. This report presents the results of surveys of four facets of career education: local school districts, State education agencies, teacher training institutions, and producers of curriculum materials.

"Of nine learner outcomes of career education proposed by USOE (1975), all were rated by local school districts as somewhere between 'important' and 'absolutely necessary'. The implementation of activities to achieve these outcomes was gradual, however, with a majority of survey respondents describing their districts' efforts as 'now limited'. Although a majority of the nation's school districts were engaged in at least some staff development activities in career education, only three percent had taken all five steps of obtaining funds, allocating staff, writing a formal policy, forming an advisory committee, and carrying out formal evaluations with respect to career education. Approximately 20 percent of the nation's teachers have been involved in career education activities. Of fifteen student career education activities assessed, although half of the nation's students were in school districts in which at least one was implemented broadly, only a fifth were in districts that had implemented over half the activities broadly and only three percent were in districts where all had been implemented broadly. Funding needs were frequently mentioned as critical to the further development of career education in the local districts.

"A clear dichotomy was apparent in the activities reported by the local districts 'to help young people learn about and prepare to engage in work as a part of their way of living'. There were activities that had been carried on traditionally as a part of educators' concerns that their students be prepared to cope with society when leaving school, and there were the innovative activities that were being introduced as a part of the current national career education movement. Although the distinction between the two types of activity is not altogether obvious in practice, the innovative activities were roughly identifiable as those tending to occur in districts in which formal career education policy statements had been or were being written. These activities differed from the traditional activities on two notable dimensions: they tended to be carried out in the earlier grades–traditional activities relating school to work were almost exclusively at the secondary level; and they tended to be carried out by teachers rather than counselors –counselors have long played a role that significantly overlaps the career educator role, so their involvement in these activities is not as novel as the involvement of classroom teachers.

"Increased community involvement emerged as an essential component of successful career education programs: levels of activity were higher where representatives of the business, labor, and industrial community were reported involved. Also, the activities most frequently reported as effective in helping young people learn about and prepare for work all involved bringing students together with work world representatives in one way or another.

"At the State level, there was a remarkable variation of activities to promote career education in different States. Although most State education agencies had policy statements on career education, very few States had enacted specific legislation supporting career education. In most local districts in which the level of career education activity was high, there was acknowledgment that support from the State education agency was helpful; however, in many States the State education agency impact on a few local school

districts, through demonstration projects, was much greater than on the majority of districts.

"In the teacher training institutions, there was a great deal of discussion of career education; however, the implementation of actual career educator training programs was not yet at a significant level. Few schools of education allocated as much as three percent of their budgets to career education programs. The need, so strongly stated by local school districts and State education agencies, for help in developing the school staffs into career education, was only beginning to be met by the colleges for teacher education.

"Throughout the country, the words 'career education' were being heard ever more frequently, and the USOE guidelines were receiving much discussion and were having an impact in many localities. In the one-quarter of responding districts in which career education efforts were described as based on those guidelines, the level of career education activity was higher than in the other three-quarters of the districts. In terms of a pervasive reform of education, career education was beginning to have a visible impact on schools across the country in 1974-75. Its acceptance and implementation were still tentative, however, as many school districts waited to see whether 'it really works'."

Session 804
Report on the National Survey on the Current Status of Career Education

Science Club, Learning Stations Approach Used in Midwest Elementary Classrooms

This session consisted of several presentations by elementary school teachers involved in career education.

An elementary school teacher from Michigan City, Michigan told participants about the 55/68 Science Club (55 miles per hour/68 degrees) which stresses student-directed environmental education.

Members of the club write letters and/or petition on an environmental issue about which they can develop a common opinion or recommendation. Students make on-site inspections of areas of intended effort and brainstorm the problem, listing all possible activities they might perform and the effects group efforts might have on other aspects of the environment. Resource people, such as local conservation officers, are contacted to provide answers to unresolved questions.

Realistic timelines are established as goals are stated, and students discuss how they will accomplish the goals if they are unable to receive assistance in implementing them. Student members attend meetings with community resource people and the group leader. The importance of record-keeping is stressed in all areas.

In summary, the program is based on the beliefs that learning can be giving as well as receiving, that children need to feel useful and not used, and that adults need to feel needed and appreciated rather than patronized.

Also during this session an elementary school teacher from Crown Point, Indiana discussed how she became involved in career education, presented examples of career education activities that can be integrated into existing curriculum, and described the use of a learning stations' approach in her first grade classroom.

Learning stations are used to provide an atmosphere in which children can move, make decisions, help each other learn, socialize, manipulate objects rather than always dealing in the abstract, acquire new skills, and practice learned skills.

The philosophy, design, goals, objectives, and conceptual theme of the Crown Point, Indiana Community School Corporation were discussed. At the primary level, self and the world of work are emphasized, while decision-making and implementing decisions are given more emphasis at the intermediate level.

Session 810
The Elementary Teacher in Career Education

Industrial Arts Contributes to Career Education Spectrum

An Assistant Professor of Career Education from the University of Wyoming noted some of the initial confusing factors confronting industrial arts teachers when the term career education was introduced.

Philosophical questions such as whether career education is all education or a part of all education; terminology and definitions for commonly used phrases; and the boundaries of industrial arts activities encompassed within career education hands-on experiences were all cited as sources of confusion for industrial arts teachers.

Recently, however, confusion has abated and it is now evident that industrial arts has contributed certain unique segments to the total career education effort. Industrial arts at the elementary, middle school, and high school levels has provided proven concepts of industrial exploration, awareness, and skill development to career education.

Session 812
The Industrial Arts Teacher in Career Education

Wyoming Program Relates Science Activities to Careers

In Powell, Wyoming public schools, science teachers believe that one of the most meaningful ways to teach science is to relate it to the occupations that need to have a basic understanding of science.

To make science more career-related, a booklet was prepared describing present activities being taught and how these activities could relate directly to careers. This booklet was prepared as the first in a series of steps to encourage science teachers to become more realistic in their approach to career-related activities.

Next, the teachers spent time in a summer workshop preparing various career-related activities that could be used to supplement the classroom activity and to tie the "real world" to what was being presented in the classroom.

Teachers now use individual units in their curriculum. These units provide teachers with ideas as to how a specific science activity can be related to careers by the use of bulletin boards, outside written assignments, speakers who use this specific scientific knowledge in their career, etc.

The program is currently being evaluated and activities and supplemental programs are being updated.

Session 813
The Secondary Science Teacher in Career Education

Cincinnati Schools Work With Publisher on Career Materials

In 1969, a group of home economics teachers in the Cincinnati public schools decided they were not meeting all of the needs of their students. Problems evident in their classes included loss of interest in home economics classes because of "watered-down" junior high programs and lack of appeal to a variety of economic backgrounds among students.

After analyzing a variety of alternatives to the existing curriculum, the Cincinnati school district decided to teach home economics from a career education point of view. During 1969 and 1970 career-oriented manuals were developed by Cincinnati teachers in the areas of food industry, interior design, the story of fabrics, child development, the art of nursing, and the hotel and motel industry. Emphasis in these programs was on work processes and related careers.

The materials were extremely successful, due partially to the fact that they were not critical of socio-economic groups, appealed to both boys and girls, were activity-oriented, allowed students to learn information that related both to industry and the home, and helped students to formulate career goals which would guide them in choosing careers in the future.

When it became obvious in 1971 that the Cincinnati public schools could no longer continue developing their own materials, Cincinnati contacted the McKnight Publishing Company and sold the copyrights for all of Cincinnati's career-oriented home economics programs to the McKnight Company.

Following a nationwide field test organized by McKnight to test and revise the materials, books were published on exploring careers in the areas of child care and in hospitality and food services. Two additional career exploration books on careers in fabrics and in living environments will be ready for publication in 1977. The four books are different in environments, knowledge, and skills but are alike in that they are developed around process education and all develop knowledge which can be used by a consumer, a family member, or in a career.

Session 814
The Home Economics Teacher in Career Education

Minneapolis Community College, Vocational School Cooperate

This session dealt with how North Hennepin Community College, Minneapolis, Minnesota, and Suburban Hennepin Area Vocational Technical School, Brooklyn Park, Minnesota, shared in planning and development for career education opportunities for students.

Specifically discussed were the following joint activities between the two above institutions: (1) exchange of appropriate faculty, (2) exchange of students for specific career program training, (3) development of joint publications and brochures, (4) development of career ladder curricula to provide for easy transfer between institutions within career programs, (5) joint interscholastic and intramural program activity, (6) organization of a joint program committee, (7) arrangements for joint faculty workshops, and (8) a synopsis of less formal activities between campuses—i.e., athletic contests, sharing of facilities, dinners, etc.

Session 815
Career Education Practices: Community College

Counselors Play Important Role in Wisconsin Career Education Program

Secondary school counselors play an important role in the Oregon, Wisconsin career education program.

At the junior high level the counselor works with the teachers on a program of career exploration. Once in high school, all freshmen work with classroom teachers to develop a 4-year tentative plan sheet with three possible careers or educational goals. High school counselors work with the faculty to incorporate career education objectives into their classroom activities. The counselor and vocational education coordinator also provide leadership for staff in-service training and discuss new materials, ideas, and programs relevant to career education. Throughout this ongoing process the counselors work with students on an individual basis and in small groups to help students explore their career plans and develop job-seeking skills.

Every other year a career day is held featuring speakers from the community in different areas of work. In alternate years when career day is not held, the school cooperates with the local Chamber of Commerce to conduct a business and industry day. School is dismissed for a half day to permit all K-12 staff to visit local businesses and industries to gain a greater awareness of work stations existing in the community.

Career games are also used in the program. Children may check games out and take them home; therefore parents may also become involved in the educational process.

Session 817
The Secondary School Counselor in Career Education

Florida Occupational Specialists Help Students Make Career Decisions

In 1970, the Florida legislature enacted into law a plan to help schools provide more adequate guidance services. The legislation provided for the establishment of a new position—that of the occupational specialist—in the Florida school system. Occupational specialists were to be work-experienced people who could assist students with career decision-making and ultimately career placement. They were to serve as an alternative to providing guidance services that were solely dependent on professional personnel, thus enabling counselors to work with more students in individual and group situations.

Occupational specialists are selected on the basis of their maturity, work experience, and ability to relate to young people. Some have baccalaureate degrees or above and some are working toward one. They are supervised by certified guidance counselors and school administrative personnel.

The work of the occupational specialist includes identifying and counseling actual or potential school dropouts and the parents of those students. Occupational specialists also provide career counseling for other students in the school system, help to plan and implement vocational testing programs, assist in orienting students to job-related preparatory programs, and assist in job placement and follow-up services. They encourage and assist students and teachers to schedule visits to industry, community agencies, vocational schools, area businesses, and community colleges. They also work with teachers and administrators to develop career awareness in all students.

Session 821
The Career Education Coordinator

Texans Share Staff Development Practices and Programs for Career Education

Several presenters shared a variety of ideas for career education staff development practices and programs.

At the Stephen F. Austin State University, Nacogdoches, Texas, a project is underway to train and retrain people to implement career education programs at the K-12 level. In this process, master career education teachers are trained by a teacher education institution; these teachers field-test career education curricula of their own design; principals head teams of practitioners; and a model develops whereby teachers train teachers to implement career education.

The Teacher-Directed Model for Career Education Implementation is another program being used by many Texas school districts. This model, the result of a 4-year research project, is a packaged staff development program and does not require the use of outside consultants. The model has been prepared in five separate modules which correspond directly to the steps to be taken for integration into the instructional process. Needs assessment is the heart of the model so that individual district needs can be met flexibly. Each step is written so that it clearly conveys each staff person's responsibility in making it work.

Also presented were some ways in which teachers may infuse career education into their curriculum. The "mystery guest" approach, based on student identification of a resource person's career; a career flashcards game; and the use of media such as career education films and/or materials were discussed.

Session 823
Staff Development Practices and Programs in Career Education

Chamber of Commerce Helps Meet Career Education Objectives

Huntington Beach, California school personnel advocated a strong link with the Chamber of Commerce to help meet career education objectives and provide a channel for articulating all of the demands being placed on the community to provide for a viable role in the education of our youth.

Schools must first determine their needs and expectations in terms of the type of community participation sought, how requests will be coordinated, who will be responsible for the program, and how needs will be communicated.

Before making the first contact with the Chamber of Commerce, information should be obtained as to the relationship between the Chamber and public agencies, the officer and committee structure of the Chamber, district membership and procedures for membership, the amount of time needed to become active with the Chamber, and the number of Chambers within district boundaries.

After the Chamber manager or director has been contacted and agrees to present the proposed program to the Board, the requesting party's role in making the presentation and implementing the plan can be established.

Chambers can provide assistance in promoting and supporting a resource plan, mailing services, and input to the program through their education committees. They can assist with development of resource guides, provide speakers on economic and consumer education, and help the teaching staff learn more about the business community by sponsoring visits to industry, summer hiring programs for teachers, and seminars.

Session 824
The Chamber of Commerce in Career Education

Business-Education-Industry Cooperate in Minneapolis-St. Paul

Four different programs are presently underway in the Minneapolis-St. Paul, Minnesota area in which business, industry, and education personnel are cooperating to bring improved opportunities to students.

A career exploration program is offered to juniors and seniors in high school by the Rotary Club of Minneapolis and Minneapolis public school counselors. In this program, a student visits a business executive, professional, or other worker at his/her job site for from 2-3 hours to a full day to observe the tasks involved in that job and ask questions about career preparation and pathways, benefits, disadvantages, satisfactions, lifestyle, etc. of that particular career.

A K-12 career planning program for college-bound students is offered at a private school with the cooperation of General Mills. This program features a career learning center providing information about career opportunities and preparation for all students K-12, either in groups or individually. Each May the program also sponsors a month of internships which give young people experience within a wide variety of industries.

Another cooperative venture features Chamber of Commerce involvement with career education in the St. Paul public schools. Thirty teachers per year are given a 1-week seminar in business practices and economics and are placed on the job for an additional five weeks to experience the business world firsthand and to update their subject areas in terms of the world of work.

Minneapolis public schools and the Minneapolis Chamber of Commerce are working together to in-

volve students and staff in citywide career fairs, summer seminars, etc. One specific seminar model, Career Education and the Future, exposes teachers, counselors, and administrators to the numerous business and industry careers in their community, using Northern States Power Company as an example, and explores with them ways in which the business community can help students form realistic and satisfying goals and attitudes toward self, education, and a career. Eight specially designed multi-media programs on various aspects of the future are used to examine the philosophical and practical components of career education.

Session 830
Involving the Business Community in Career Education

TV Viewed as Important Tool in Career Education Implementation

This session, conducted by a media consultant from Lawrence, Kansas, illustrated how students can use media effectively in the classroom setting, emphasized the importance of media as a communicative tool in preparation for a total lifestyle, and demonstrated how media (especially television) can be used actively in any career education program.

The presentation dealt with media as a whole and with television as part of that whole and as important to all aspects of a curriculum.

Illustrations of student-produced media were provided in the form of videotapes, Super 8 films, and slide/tape presentations.

The need for students to have an opportunity to learn to live with and actively use all kinds of media forms was also stressed.

Session 837
Television in Implementing Career Education

Mrs. Mary E. Ashby, Career Education Consultant, Lawrence Unified School District, Lawrence, Kansas, and Mr. John Forbes, Assistant Principal, Lawrence High School, Lawrence, Kansas, in a session on Television in Implementing Career Education.

Concepts of Work Applied to Career Education

This session provided participants with an overview of the concepts about work, identified reference works and other useful tools for explaining the various aspects of work to students, and provided examples of the application of the concepts of work to career education.

A comparison of the first school, as defined by Benjamin Harold and Raymond Wayne in *The Saber Tooth Curriculum*, was made with the typical present comprehensive high school curriculum. Other comparisons between the modern school and its emphasis on preparing the student for college and the job structure were made.

The nature of work was defined in terms of time committed to work and relationships among various occupational categories. The structure of work was defined in terms of known occupational and industrial classifications. Various reference works and techniques for educators to use them were discussed, and illustrations were provided of programs in work evaluation and job survival kits.

Session 842
Job Acquisition and Retention Skills Programs

Career Development Essential Ingredient of Human Growth and Development

This session stressed career development as an essential part of human growth and development, showed how career development strategies and activities can be integrated into career education programs, and demonstrated various techniques in the areas of values clarification, decision-making, and humanistic education.

An Assistant Professor in Pace University, New York's Elementary Education Department discussed modules developed on (1) simulation of the adult worker role by children and (2) fostering motivation in children.

A representative of the New York City Board of Education's Bureau of Educational and Vocational Guidance discussed values clarification as a part of career development, development of decision-making skills with students and parents, and humanistic approaches toward changing attitudes and assisting in the self-enhancement process. Participants were involved in the discussion via simulation activities.

Session 845
Career Development as a Part of Human Growth and Development

Colorado Program Focuses on School and Community to Implement Career Education

Speakers from Monte Vista, Colorado discussed the roles of various school district and community personnel in effectively implementing career education. Among subjects discussed were ways to overcome staff and community resistance or apathy; ways to overcome funding arguments against innovation, including seeking additional funds and using the creativity of classroom personnel, administrative staff, and students; ways to motivate both staff and students; and the necessity for developing and utilizing leadership.

An audio-visual slide/tape presentation was shown to describe the history of career education in the Monte Vista public schools and to highlight some classroom activities which the school district has found to be innovative and inexpensive.

Session 846
Career Education Practices in Rural K-12 Settings

Illinois Develops CERT to Assess Career Education Concepts

Career Education Readiness Measurement and Research is a 2-year project funded by the Division of Adult, Vocational, and Technical Education of the Illinois Office of Education in cooperation with the Counselor Education Department of Southern Illinois University, Edwardsville, Illinois. The purpose of this project has been to develop a Career Education Readiness Test (CERT), for use with grades K-6, that integrates the two educational components specified in its title: career education and readiness.

The CERT is based on an assessment of the needs of individuals and groups of students for career education at various age/grade levels so that teachers can determine students' readiness to assimilate the material found in a career education curriculum.

The profile of scores produced by the CERT will allow teachers to coordinate career education learning experiences with the individual student's cognitive and affective developmental level, interests, attitudes, and abilities. The CERT produces scores which provide estimates of the student's: (1) level of esteem ascribed to various occupations; (2) biased perceptions of various careers due to sex stereotyped thinking; (3) ability to apply categorical thought processes to the world of work; (4) realistic perceptions of duties performed by and characteristics required of workers in various occupations; (5) conceptual knowledge of the world of work; and (6) general perceptions of the rewards for work.

Session 849
Needs Assessment Procedures in Career Education

Clarksville Develops K-12 Infusion Model

In 1975, the Clarksville, Indiana Middle School became one of four Indiana schools to receive a U.S. Office of Education, Department of Public Instruction, grant to develop a K-12 infusion model for the State of Indiana.

A career education coordinator for Clarksville Schools was appointed to establish the schoolwide program of career education, following guidelines set by the State proposal. Great emphasis was placed on in-service training for teachers. A committee of teachers for each level—elementary, middle school, and high school—was formed to assess teachers' needs and interests related to career education and to set goals for workshops to be conducted on training and materials development.

The program also called for community involvement, and a 13-member community advisory committee was established, composed of community leaders representing most of the career education clusters as well as students, parents, and school staff.

Parent workshops on career education were developed through the cooperation of the PTA, and the community advisory committee assisted with development of a community resource handbook which has been provided for each teacher in the school system. Students, teachers, and community resource people participate in evaluating the use of community resource people in the classroom.

Session 850
Career Education Practices in Small City Settings

Participants browse at the Michigan State Department of Education exhibit.

Section IV: List of Presenters

GENERAL SESSION

KEYNOTE SPEAKERS

General Session 1—pages 3-6

Dr. Kenneth B. Hoyt, Director, Office of Career Education, U.S. Office of Career Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. 20201

Dr. Sidney P. Marland, Jr., President, College Entrance Examination Board, 888 7th Avenue, New York, New York 10019

Mr. Billy Reagan, General Superintendent of Schools, Houston Independent School District, 3030 Richmond Avenue, Houston, Texas 77027

General Session 2—pages 6-8

Dr. Terrel H. Bell, Commissioner of Higher Education, Utah System of Higher Education, Utah State Board of Regents, 1201 University Club Building, Salt Lake City, Utah 84111

Dr. Charles H. Buzzell, Acting Deputy Commissioner, Bureau of Occupational and Adult Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. 20201

Dr. Kenneth McFarland, Guest Lecturer, General Motors Corporation, General Motors Building, 3044 W. Grand Boulevard, Detroit, Michigan 48202

General Session 3—pages 8-9

Mr. Peter Bommarito, President, United Rubber, Cork, Linoleum, & Plastic Workers of America, United Rubber Workers of America Building, 87 S. High Street, Akron, Ohio 44308

Mr. Richard L. Terrell, Vice Chairman of the Board, General Motors Corporation, General Motors Building, 3044 W. Grand Boulevard, Detroit, Michigan 48202

General Session 4—pages 10-11

The Honorable Dr. Edward Aguirre, U.S. Commissioner of Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. 20201

THEME SESSIONS

Career Education: Who Needs It?

Session 101 – Mrs. Thelma Daley, Career Education Specialist, Baltimore County Public Schools,
Page 15 Towson, Maryland 21209

– Ms. Sharon White Hawk, Curriculum Development Specialist, Career Education Demonstration Project for American Indian Children, School of Education, University of South Dakota, Vermillion, South Dakota 57069

– Mr. Dick Hulsart, Area Development Coordinator, Education Commission of the States, National Assessment of Educational Progress, 700 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203

– Mr. George Mihaly, President, Youth Market and Opinion Research, 20 W. 86th Street, New York, New York 10024

– Dr. Jo Ann Steiger, President, Steiger, Fink and Kossecof, Inc., Consultant, National Advisory Council on Women's Educational Programs, Suite 821, 1832 M Street, N.W., Washington, D.C. 20036

– Ms. Barbara Ward, Associate Writer, National Assessment of Educational Progress, 700 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203

– Mrs. Doris West, Career Education Consultant, Region XI Education Service Center, 2821 Cullen Street, Fort Worth, Texas 76107

– Dr. Reginald Wilson, Chairman, Career Education Committee, National Urban Coalition, President, Wayne County Community College, Detroit, Michigan 48201

Major Career Education Participants in Elementary and Secondary Education

Session 102 – Dr. James Eugene Bottoms, President, American Vocational Association, Member, National Task
Page 17 Force on Career Education, and Director, Division of Program and Staff Development, State Department of Education, Atlanta, Georgia 30334

– The Honorable Marlin Brockette, Commissioner of Education, Texas Education Agency, 201 E. 11th Street, Austin, Texas 78701

– Mr. Will D. Davis, President, Texas Education Agency, 201 E. 11th Street, Austin, Texas 78701

– Mr. William C. Geer, Executive Director, Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

– Dr. Norman C. Gysbers, President-Elect for 1977-78, American Personnel and Guidance Association, 1607 New Hampshire Avenue, N.W., Washington, D.C. 20009

– Dr. Walter Kerr, President, Texas Industrial Council, 423 S. Chilton, Tyler, Texas 75710

– Mrs. Walter G. Kimmel, President, National Congress of Parents and Teachers, 700 N. Rush Street, Chicago, Illinois 60611

235

Session 102 (cont'd.) – Ms. Marilyn Rauth, Director, Educational Issues Department, American Federation of Teachers, 11 Dupont Circle, 5th Floor, Washington, D.C. 20036

– Dr. Joseph A. Sathory, Associate Director, American Association of School Administrators, 1801 N. Moore Street, Arlington, Virginia 22209

Career Education: What Proof Do We Have That It Works?

Session 301 Page 54 – Dr. Elvis Arterbury, Project Director, Partners in Career Education, 1201 N. Watson, Arlington, Texas 76011

– Dr. Lois-ellin Datta, Assistant Director, Education and Work Group, National Institute of Education, 1200 19th Street, N.W., Washington, D.C. 20208

– Dr. Sidney High, Director, Division of Career Education Programs, U.S. Office of Education, Room 3108A, ROB #3, 7th and D Streets, S.W., Washington, D.C. 20202

– Dr. Frank Rapley, Assistant Superintendent for Research and Evaluation, Jefferson County Public Schools, 675 River City Mall, Louisville, Kentucky 40202

– Dr. Richard Ruff, Evaluation Specialist for Career Education, Arizona State Department of Education, 1535 West Jefferson, Phoenix, Arizona 77032

– Dr. Phillip Spieth, Supervisor of Evaluation Studies, Dade County Public Schools, 14420 N.W. 12th Avenue, Miami, Florida 33168

Organized Labor Looks at Career Education

Session 302 Page 58 – Mr. George Butsika, Director of Education, United Steelworkers of America, 5 Gateway Center, Pittsburgh, Pennsylvania 15222

– Mr. Walter Davis, Education Director, AFL-CIO, 815 16th Street, N.W., Washington, D.C. 20006

– Mr. Reese Hammond, Director of Education, International Union of Operating Engineers, 1125 17th Street, N.W., Washington, D.C. 20036

– Mr. Carroll Hutton, Education Director, United Auto Workers, 8000 E. Jefferson Highway, Detroit, Michigan 48214

– Ms. Eugenia Kemble, Special Assistant to the President, American Federation of Teachers, AFL-CIO, 11 Dupont Circle, N.W., Washington, D.C. 20036

Community Resources for Career Education

Session 501 Page 94 – Ms. Beatrice Forrest, Vice President, Women's American Organization for Rehabilitation and Training, 100 E. Bellevue, Chicago, Illinois 60611

– Mr. Michael Goolsby, National Field Manager, 70001, Ltd., 151 E. Chestnut Hill Road, Newark, Delaware 19711

– Dr. Audrey Jackson, President, National School Volunteer Program, 1410 N.E. 2nd Avenue, Miami, Florida 33030

– Mr. Ronald C. Murphy, National Executive Committeeman, American Legion, 6821 N. 58th Avenue, Glendale, Arizona 85301

– Dr. Gloria Scott, President, Girl Scouts of the USA, 830 3rd Avenue, New York, New York 10022

– Mr. Kenneth Smith, President, 70001, Ltd., 151 E. Chestnut Hill Road, Newark, Delaware 19711

Session 501 (cont'd.) – Dr. Ivan Stafford, Project Director, Finance Development, National Office, Boy Scouts of America, New Brunswick, New Jersey 08902

– Mr. William Weisgerber, Director of Career Education, Michigan State Department of Education, P.O. Box 30008, Lansing, Michigan 48909

Promise and Potential for Career Education in Post-Secondary Education

Session 502 Page 96 – Dr. Alva Cooper, Staff Consultant, College Placement Council, 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

– Dr. Ernest Dow, Executive Director, National Association of Black Adult Educators, 600 A Street, S.E., Washington, D.C. 20003

– Dr. Robert Herrick, Executive Director, College Placement Council, 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

– Dr. Frank Hubert, Dean, College of Education, Texas A&M University, College Station, Texas 77843

– Mr. Ralph Porter, Associate Director, National Commission for Cooperative Education, 360 Huntington Avenue, Boston, Massachusetts 02115

– Dr. Granville Sawyer, Board of Directors, American Council on Education, and President, Texas Southern University, 3201 Wheeler Street, Houston, Texas 77004

Delivering Career Education Through National Business and Industry Organizations

Session 701 Page 127 – Dr. Donald Clark, Executive Director, National Association for Industry-Education Cooperation, 607 Walnut Avenue, Niagara Falls, New York 14302

– Mr. Charles Heatherly, Director of Education, National Federation of Independent Business, 150 W. 20th Avenue, San Mateo, California 94403

– Mr. Harry Seipel, Manager, Personnel Training, Brown and Root, Inc., P.O. Box 3, Houston, Texas 77001

– Mr. Eugene B. Sydnor, Jr., Member, Education Committee of the U.S. Chamber of Commerce, and President, Southern Department Stores, Inc., P.O. Box 1470, Richmond, Virginia 23212

– Mr. R. Shane White, Southwestern Divisional Manager, U.S. Chamber of Commerce, Suite 750, 4835 LBJ Freeway, Dallas, Texas 75234

– Mr. Karl Wolfe, Director, Health Manpower Development, National Health Council, Inc., 1740 Broadway, New York, New York 10019

– Ms. Marie Day, Director, Student Teacher Placement, Houston Independent School District, 3030 Richmond Avenue, Houston, Texas 77027

– Dr. Sharlene Hirsch, National Director, Executive High School Internship Programs, 680 5th Avenue, 9th Floor, New York, New York 10019

– Mr. Lawrence Marshall, Assistant Superintendent, Houston Independent School District, 3030 Richmond Avenue, Houston, Texas 77027

– Ms. Joyce Moss, Program Coordinator, Executive High School Internship Program, Houston Independent School District, 3030 Richmond Avenue, Houston, Texas 77027

237

Session 702 – Mr. Gilbert Burnley, State Senator, 2065 Geddes Avenue, Ann Arbor, Michigan 48104
Page 130

– Mr. Warren Hill, Executive Director, Education Commission of the States, 1860 Lincoln Street, Denver, Colorado 80203

– Mr. Jack Jennings, Counsel, Subcommittee on Education, U.S. House of Representatives, Washington, D.C. 20515

– Mr. Leo Lucero, State Representative, Chairman, House Education Committee, Department of Education, 201 E. Colfax Avenue, Denver, Colorado 80203

238

CLUSTER A – CAREER EDUCATION BY LEVELS AND SETTINGS

All Volunteer Armed Forces in Career Education

Session 316 – Mr. Thomas Carr, Director of Education, Department of Defense, Pentagon,
Page 63 Washington, D.C. 20301

Career Education and the Department of Defense Dependents' Schools

Session 442 – Dr. Daniel Stabile, Coordinator, Career Education, Department of Defense, Office of Dependents'
Page 195 Schools, 2461 Eisenhower Avenue, Alexandria, Virginia 22331

Career Education Practices: Area Vocational High School

Session 111 – Mr. James R. Hollis, Coordinator, Special Needs, State Department of Education, 844 State Office
Page 170 Building, Montgomery, Alabama 36130

Session 410 – Mr. Joseph Tomaselli, Principal, Ocean County Vocational Technical School, Old Freehold Road,
Page 191 Toms River, New Jersey 08753

Session 711 – Mr. Charles Milhoan, Job Placement Coordinator, Washington County Vocational School, Marietta,
Page 138 Ohio 45750

– Mr. Paul Reid, Project Director, Washington County Career Planning Program, Washington County Vocational School, Route 2, Marietta, Ohio 45750

Session 714 – Dr. David Mahrer, Associate Director of Career Planning and Placement, Career Planning and
Page 135 Placement Center, Lieber College, University of South Carolina, Columbia, South Carolina 29208

Career Education Practices: College/University Setting

Session 114 – Dr. James Ellingson, Professor of Secondary Education, Oregon College of Education, Monmouth,
Page 25 Oregon 97361

– Dr. Allen Lee, Professor of Career Education, Portland State University, P.O. Box 751, Portland, Oregon 97207

– Dr. David L. Mahrer, Associate Director of Career Planning and Placement, Lieber College, University of South Carolina, 1321 Pendleton, Columbia, South Carolina 29208

– Dr. Darrell Ward, Director, Interinstitutional Consortium for Career Education, 3180 Center Street, N.E., Salem, Oregon 97301

Session 808 – Dr. Nancy J. Caruso, Professor of Cooperative Education, and Executive Vice President and President-
Page 153 Elect, Cooperative Education Association, 360 Huntington Avenue, Boston, Massachusetts 02115

– Dr. Irwin Feifer, Director for Program Development, Cooperative Education, LaGuardia Community College, 31-10 Thompson Avenue, Long Island City, New York 11101

– Ms. Janice Firestein, Associate Director, National Commission for Cooperative Education, 360 Huntington Avenue, Boston, Massachusetts 02115

239

Session 808 (cont'd.) – Dr. Jane Schacter, Professor of Cooperative Education, and Coordinator, Cooperative Education, Northeastern University, Boston, Massachusetts 02115

Mr. Tarry G. Slusher, Manager of Training and Development, The Lummus Company, 2000 West Loop South, Houston, Texas 77027

Career Education Practices: Community College

Session 113 Page 25 – Ms. Mildred Davison, University Liaison for Adult and Continuing Education and Career Information Specialist, City University of New York, 535 E. 80th Street, New York, New York 10021

– Dr. Irwin Feifer, Director for Program Development, Cooperative Education, LaGuardia Community College, 31-10 Thompson Avenue, Long Island City, New York 11101

– Dr. Marvin Feldman, President, Fashion Institute of Technology, 227 West 27th Street, New York, New York 10001

– Dr. Jeffrey Kleinberg, Director of Counseling, LaGuardia Community College, 31-10 Thompson Avenue, Long Island City, New York 11101

– Dr. Martin Moed, Dean of Faculty, LaGuardia Community College, 31-10 Thompson Avenue, Long Island City, New York 11101

Session 315 Page 184 – Mr. Donald W. LaVine, Program Advisor for Mechanical Engineering and Technology, Rochester Community College, Rochester, Minnesota 55901

Session 413 Page 192 – Dr. Jerome Weynand, President, San Antonio Union Junior College District, 1300 San Pedro Avenue, San Antonio, Texas 78284

Session 713 Page 134 – Mr. James Garmon, Director, Career Development Center, Orange Coast Community College, 2701 Fairview Road, Costa Mesa, California 92626

– Dr. Robert B. Mook, President, Orange Coast Community College, 2701 Fairview Road, Costa Mesa, California 92626

Session 815 Page 226 – Dr. John Helling, President, North Hennepin Community College, 7411 85th Avenue N., Minneapolis, Minnesota 55445

– Mr. Ed Hill, Director, Suburban Hennepin Area Vocational Technical School, 9000 N. 77th Avenue, Brooklyn Park, Minnesota 55445

Career Education Practices: Community Education Settings

Session 116 Page 170 – Mr. Dan Cowart, Coordinator, Applied Program of Public Service, Georgia State Department of Education, North Gwinnett High School, Level Creek Road, Suwanne, Georgia 30174

– Dr. Toby Hill, Assistant Superintendent, Crawford County Schools, Crawford County Board of Education, Roberta, Georgia 31078

– Ms. Melinda Skiles, Community Coordinator, North Gwinnett High School, Level Creek Road, Suwanne, Georgia 30174

Session 412 Page 78 – Mr. David Doherty, Director of the Division of Research and Development, Flint Schools, 923 E. Kearsley Street, Flint, Michigan 48507

Session 612* – Dr. James Eugene Bottoms, President, American Vocational Association, Inc. and Director, Program and Staff Development, Georgia State Department of Education, 156 Peachtree Circle, N.E., Atlanta, Georgia 30334

** For sessions for which no report coverage was available, no page numbers are referenced.*

240

Session 612 (cont'd.) – Ms. Dee Dee Sharpe, Education Program Administrator, Georgia State Department of Education, 156 Peachtree Circle, N.E., Atlanta, Georgia 30334

– Ms. Lee Turza, Instructional Television Coordinator, WNIT-TV, 2424 California Road, Elkhart, Indiana 46514

Career Education Practices: Early Primary Grades

Session 107 – Ms. Verlie Curran, Career Education Coordinator, Trask Elementary School, Lindsley Drive, Page 169 Plainville, Connecticut 06062

Session 207 – Mrs. Joyce Frank, Second Grade Teacher, Rayla Elementary School, 2330 Kewanne Way, Page 40 Hastlett, Michigan 48840

– Ms. Bonnie Giffin, Counselor, Southeast Oakland Vocational Educational Center, 5055 Delemere, Royal Oak, Michigan 48073

– Mr. Arthur T. Miller, Assistant Superintendent for Instruction, Rockford Public Schools, 235 Courtland Street, Rockford, Michigan 49341

Session 507 – Mr. William Horne, Coordinator, Technology for Children, Bayonne Board of Education, Page 197 Avenue A and 29th Street, Bayonne, New Jersey 07002

Session 706 – Ms. Diane Greene, Elementary Career Education Coordinator, Miller School, 65 Steiner Avenue, Page 215 Akron, Ohio 44301

Career Education Practices: Interdisciplinary High School

Session 310 – Dr. Allan G. Cannon, Superintendent, Lufkin Independent School District, 800 E. Denman Street, Page 182 Lufkin, Texas 75901

– Ms. Charlene Crocker, Instructor, Stephen F. Austin State University, 1936 North Street, Nacogdoches, Texas 75961

– Mr. Michael Hay, Principal, Lufkin Independent School District, 800 E. Denman Street, Lufkin, Texas 75901

– Dr. Douglas Prewitt, Assistant Superintendent for Business, Lufkin Independent School District, 800 E. Denman Street, Lufkin, Texas 75901

– Ms. Christine Seago, Language Arts Coordinator, Lufkin Independent School District, 900 E. Denman Street, Lufkin, Texas 75901

– Mr. Edward Smith, Auto Mechanics Teacher, Lufkin High School, 900 E. Denman Street, Lufkin, Texas 75901

– Mr. Bobbie York, Welding Teacher, Lufkin High School, 900 E. Denman Street, Lufkin, Texas 75901

Career Education Practices: Large Urban K-12 Settings

Session 150 – Ms. Marjory Ahrens, Career Education Consultant, Bay Arenac Intermediate School District, Page 176 4228 Two Mile Road, Bay City, Michigan 48706

– Ms. Paula Shirk, Placement Director, Lenawee Area Vo-Tec Center, 2345 N. Adrian Highway, Adrian, Michigan 49221

Session 214 – Mr. Wayne Owens, Director of Public Affairs, Re-entry and Environmental System Division, Page 42 General Electric Company, 3198 Chestnut Street, Philadelphia, Pennsylvania 19104

Session 214 (cont'd.) – Dr. Charles Peoples, Director of Urban Career Education Center, Opportunity Industrialization Center, 100 W. Coulter Street, Philadelphia, Pennsylvania 19144

– Dr. Robert Scanlon, Executive Director, Research for Better Schools, 1700 Market Street, Philadelphia, Pennsylvania 19103

– Mr. Theodore Woal, Supervisor of Vocational Guidance for the Philadelphia District, Stevens School, Room 304, 13th and Spring Garden Street, Philadelphia, Pennsylvania 19103

Session 218 – Mr. G. Patrick Feeley, Career Education Coordinator, Office of Superintendent of Public Instruction, Page 178 State Capitol, Helena, Montana 59601

Session 350 – Mr. Nick Topougis, Director of Career Education, Akron Public Schools, 65 Steiner Avenue, Page 74 Akron, Ohio 44301

Session 452 – Dr. Lee Bowen, Supervisor, Department of Career Education, Prince George's County Public Schools, Page 93 3940 Elm Street, Upper Marlboro, Maryland 20870

– Dr. Edwin Crawford, Director, Department of Career Education, Prince George's County Public Schools, 3940 Elm Street, Upper Marlboro, Maryland 20870

– Mrs. Sallie M. Fitts, Supervisor, Business Education, Prince George's County Public Schools, 3940 Elm Street, Upper Marlboro, Maryland 20870

– Ms. Theresa Gushee, Pre-Vocational Coordinator, Prince George's County Public Schools, 3940 Elm Street, Upper Marlboro, Maryland 20870

– Mr. Raymond Zimmerman, Jr., Career Development Coordinator, Department of Career Education, Prince George's County Public Schools, 3940 Elm Street, Upper Marlboro, Maryland 20870

Session 552 – Dr. David A. Bickimer, Project Director, Center for Career and Occupational Education, Page 113 131 Livingston Street, Room 612, Brooklyn, New York 11201

– Ms. Pauline R. Jones, Staff Development Supervisor, Center for Career and Occupational Education, 131 Livingston Street, 6th Floor, Brooklyn, New York 11201

– Mr. Michael J. Racanelli, Director, SCECAMP, Center for Career and Occupational Education, 131 Livingston Street, Room 612, Brooklyn, New York 11201

– Mr. Vincent Troiano, Deputy Administrator, Office of Career Education, Center for Career and Occupational Education, 110 Livingston Street, Room 839, Brooklyn, New York 11201

Session 609 – Mrs. Betty Barr, Director of Career Education, Omaha Public Schools, 4469 Farnam Street, Page 207 Omaha, Nebraska 68131

Session 851 – Ms. Geraldine Uzzell, Coordinator, Guidance Resource Center, Barringer High School, Page 164 90 Parker Street, Newark, New Jersey 07104

Career Education Practices: Middle/Junior High School

Session 109 – Mrs. Ellen F. Datcher, Acting Director of Experience-Based Programs, Office of Career Development, Page 24 Washington, D.C. Public Schools, 415 12th Street, N.W., Washington, D.C. 20009

– Ms. Bessie Etheridge, Director of Career Development, Office of Career Development, Washington, D.C. Public Schools, 415 12th Street, N.W., Washington, D.C. 20009

Session 209 – Mr. Kenneth Drenth, Coordinator, Career Education Services, Armory Place, Box 883, Page 177 Sault Ste. Marie, Michigan 49783

Session 209 (cont'd.) – Ms. Kaye Jeter, Supervisor, Career Education, Pontiac Public Schools, Eastern Complex, 25 South Sanford, Pontiac, Michigan 48053

– Mr. Daniel Pappas, Director, Michigan Career Exploration Project, 33500 Van Born Road, Wayne, Michigan 48184

Session 309 – Mr. William Cashill, Administrative Assistant, Hackettstown High School,
Page 63 Hackettstown, New Jersey 07840

– Mrs. Virginia Fraleigh, Project Director, Work-Ed Project, Hackettstown High School, Hackettstown, New Jersey 07840

Session 409 – Mr. Michael T. Quinn, Coordinator, Preparation for Occupations Model, 20 W. 40th Street,
Page 22 New York, New York 10018

– Mr. Anthony Sanfilipo, Community Superintendent, District #24, 67-54 80th Street, Middle Village, Queens, New York 11379

– Dr. Delius Wilson, Principal, Boys' and Girls' High School, 1700 Fulton Street, Brooklyn, New York 11216

Session 510 – Ms. Carole O'Keefe, Editor-in-Chief, Gregg Division, McGraw-Hill, 1221 Avenue of the Americas,
Page 86 New York, New York 10020

Session 536 – Mr. Ronald Atkins, Principal, Frederick Jr. High School, P.O. Box 380, Frederick, Colorado 80530
Page 109

– Ms. Carol Lewis, District Career Coordinator, Saint Rain Valley Schools, Longmont, Colorado 80501

– Ms. Jeanette Vyduna, Teacher, Frederick Jr. High School, P.O. Box 380, Frederick, Colorado 80530

Session 709 – Mr. James Clark, Director of Career Education, Parsippany Public Schools,
Page 215 Parsippany, New Jersey 07054

Session 811 – Mr. Donald J. Davis, Career Education Consultant, Area Education Association #16, 305 Avenue F,
Page 75 Fort Madison, Iowa 52657

– Miss Imogene Diekman, Home Economics Teacher, Washington Junior High School, Ottumwa, Iowa 52501

– Mrs. Marguerite Miller, Team Leader (Seventh Grade), Washington Junior High School, Ottumwa, Iowa 52501

– Mrs. Joyce Williams, Consultant, Mental Retardation, Area Education Association #15, Ottumwa Airport, Ottumwa, Iowa 52501

Career Education Practices: Post-Secondary Area Technical and Vocational Schools

Session 314 – Mr. Orval Gabriel, Career Education and High School Relations Coordinator, District Technical
Page 184 Institute, 620 W. Clairemont Avenue, Eau Claire, Wisconsin 54701

Career Education Practices: Private Trade, Technical, and Business Schools

Session 515 – Mr. Melvin Hadley, Program Coordinator, Center for Career and Occupational Education, New York
Page 150 City Board of Education, 110 N. Livingston Street, New York, New York

– Mr. Melvin Mungin, Program Coordinator, Bronx Career Counseling and Resource Center, 315 S. 1st Avenue, Mt. Vernon, New York 10550

– Mr. John Staton, Field Placement Counselor, Auxiliary Services for High Schools, New York City Board of Education, 59 Schermerhorn Street, Brooklyn, New York 11201

Career Education Practices: Rural K-12 Settings

Session 133 – Mr. James Brown, Superintendent, Ritchie County Schools, 217 W. Main Street, Harrisville, West Virginia 26362
Page 173

– Mr. Floyd K. Cronin, Director, DWC Center, 134 S. Penn Avenue, Harrisville, West Virginia 26362

Session 251 – Mrs. N. Marie Gass, Assistant Consultant for Career Education, Bangor School System, Bangor, Maine 04401
Page 38

– Mr. Phillip A. Gonyar, Assistant Superintendent for Instruction, Bangor School System, Bangor, Maine 04401

– Ms. Nona Thompson, Consultant, Career Education, Bangor School System, Bangor, Maine 04401

Session 349 – Mr. George O. Coan, Jr., Principal, Wellford Intermediate School and Director of Career Education, Spartanburg County School District #5, P.O. Box 307, Duncan, South Carolina 29334

Session 450 – Dr. Carl H. Larson, Assistant Superintendent for Curriculum and Instruction, Iowa Central Community College, 330 Avenue M, Fort Dodge, Iowa 50501
Page 197

– Ms. Jan McMahill, Career Coordinator, Prairie Community Schools, Box 49, Gowrie, Iowa 50143

Session 550 – Mr. Harry N. Drier, E.D.S., Project Director, The Center for Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210
Page 112

Session 652 – Ms. Angelina Romero Sullivan, Instructor, Sapello High School, Sapello, New Mexico 87701

Session 751 – Ms. Maryanna Elam, Director, Career Education, Mad River Green, Local Board of Education, 3920 Fairfield Pike, Springfield, Ohio 45502
Page 147

– Mr. Larry Etnire, Curriculum Coordinator, Hopi Health Profession Development Program, Hopi Reservation, Oraibi, Arizona 66039

– Ms. Bernadette Griffith, Career Education Project Director, Cashmere School District, 210 S. Division, Cashmere, Washington 98815

– Mr. Al Renzelman, Coordinator, Career Education, Holyoke School District, Holyoke, Colorado 80731

Session 846 – Dr. John Holcomb, Superintendent of Schools, Monte Vista Public Schools, 1444 Huxley, Monte Vista, Colorado 81144
Page 229

– Mr. Richard Richmond, Director, Special Projects, Monte Vista Public Schools, 1444 Huxley, Monte Vista, Colorado 81144

– Mr. Donald Schall, President, Board of Education, Monte Vista Public Schools, Schall Iron Works, 1021 North Highway 285, Monte Vista, Colorado 81144

Career Education Practices: Senior High School

Session 110 – Dr. Margaret Ferqueron, Consultant, Career Education, Broward County Schools, 226 W. Jefferson Street, Room 37, Tallahassee, Florida 32303
Page 169

– Ms. Myrtle Hunt, Director, Career Education, Pinellas County Schools, 3230 9th Avenue, S., St. Petersburg, Florida 33712

– Ms. Susan Key, Community-Based Career Education Specialist, Evans High School, 4944 Silver Star Road, Orlando, Florida 32808

Session 110 (cont'd.) – Mrs. Anne McMichael, Coordinator, Career Education, Orange County Public Schools, 410 Woods Avenue, Orlando, Florida 32805

– Ms. Vicky Ralph, Salable Skills Specialist, Orange County Public Schools, 410 Woods Avenue, Orlando, Florida 32805

– Mr. Bill Rennie, Supervisor, Career Education, Pinellas County Schools, 3230 9th Avenue, S., St. Petersburg, Florida 33712

– Mr. Bill Ripley, Program Coordinator, Office of Career Education, Orange County Public Schools, 410 Woods Avenue, Orlando, Florida 32805

Session 210 Page 177 – Mr. Roy Bagley, Director of Career Education, Greely High School, Gyger Gym, Main Street, Cumberland, Maine 04102

– Ms. Paula Smith, Curriculum Coordinator, Greely High School, Gyger Gym, Main Street, Cumberland, Maine 04102

Session 511 Page 101 – Mr. Walter Bucklin, Director of Career Education, Manatee County Schools, Bradenton, Florida 33587

– Dr. Mary F. Green, Guidance Specialist, Career Education Consortium, Manatee Junior College, P.O. Box 1849, Bradenton, Florida 33507

– Dr. John Pelletti, Director, Career Education, Sarasota County Schools, Sarasota, Florida 33577

Session 634 Page 211 – Mr. Spicer Bell, Vice Principal, Walkersville High School, Walkersville, Maryland 21793

– Mr. John L. Thompson, Principal, Linganore High School, Route 1, Frederick, Maryland 21701

Session 710 Page 215 – Mr. Jerry A. Scott, Director, Career Education, Albany Senior High School, Albany, Minnesota 56307

Career Education Practices: Small City Settings

Session 149 Page 175 – Dr. Arthur A. Berry, Director of Vocational Technical Education, College of Education, University of Maine at Portland-Gorham, Gorham, Maine 04038

– Mr. Frederick E. Freise, Career Education Coordinator, 637 Highland Avenue, South Portland, Maine 04106

– Mr. George MacLeod, Assistant Superintendent of Schools, South Portland School Department, 130 Wescott Road, South Portland, Maine 04106

Session 451 Page 197 – Ms. Mary Ashby, Career Education Consultant, Lawrence Public Schools, U.S. D. #497, 2017 Louisiana, Lawrence, Kansas 66044

Session 551 Page 205 – Dr. H. Dale Holden, Director, Career Education, Richland School District #2, 6831 Brookfield Road, Columbia, South Carolina 29206

– Dr. Herbert B. Tyler, Associate Superintendent, Richland School District #2, 6831 Brookfield Road, Columbia, South Carolina 29206

Session 850 Page 230 – Mrs. Fran Arnold, Coordinator, Career Education, Clarksville Middle School, 101 Ettels Lane, Clarksville, Indiana 47130

245

Career Education Practices: Suburban K-12 Settings

Session 151 – Mrs. Elaine Douma, Preparation Phase Coordinator, Wayne Board of Education, 50 Nellis Drive,
Page 176 Wayne, New Jersey 07470

– Mr. Pasquale Ratta, Awareness-Exploration Coordinator, Wayne Board of Education, 50 Nellis Drive, Wayne, New Jersey 07470

– Mr. Adrian Van Zweden, Director, Career Education Project, Wayne Board of Education, 50 Nellis Drive, Wayne, New Jersey 07470

Session 351 – Mr. George Lulos, Jr., Director of Career Education, Glassboro State College,
Page 76 Glassboro, New Jersey 08028

– Mr. Fred Rosi, Director of Career Education, Vineland Senior High School, 106 Landis Avenue, Vineland, New Jersey 08360

Career Education Practices: Teacher Education Institutions

Session 115 – Dr. Richard Gardner, Associate Professor, College of Education, Michigan State University,
Page 26 333 Erickson Hall, East Lansing, Michigan 48823

– Dr. Cas Heilman, Coordinator, Career Education, College of Education, Michigan State University, 334 Erickson Hall, East Lansing, Michigan 48823

Session 215 – Dr. Christopher Borman, Director, College of Education, Texas A&M University,
Page 43 College Station, Texas 77843

– Ms. Sharon Colson, Staff Development Specialist, Center for Career Development and Occupational Preparation, College of Education, Texas A&M University, College Station, Texas 77843

Session 516 – Dr. David C. Gardner, Chairman and Associate Professor, Department of Business and Career
Page 102 Education, Boston University, 765 Commonwealth Avenue, Boston, Massachusetts 02215

– Dr. Harold S. Resnick, Associate Professor, Department of Business and Career Education, Boston University, 765 Commonwealth Avenue, Boston, Massachusetts 02215

Session 611 – Ms. Suzanne E. Delap, Career Education Resource Specialist, Career Education Project,
Page 208 College of Education, University of Arizona, Tucson, Arizona 85721

– Dr. Betty J. Newlon, Assistant Professor, Career Education Specialist, College of Education, Room 206, University of Arizona, Tucson, Arizona 85721

Session 816 – Dr. James E. Wall, Associate Dean (Research and Development), Mississippi State University, Box JW, Mississippi State, Mississippi 39762

Career Education Practices: Upper Primary Grades

Session 108 – Mrs. Cindy Cutter, Coordinator, Other People (Other Places), Marcy Open School, 711 11th Avenue, S.E., Minneapolis, Minnesota 55414

– Mrs. Judith L. Farmer, Community Resource Coordinator, Marcy Open School, 711 11th Avenue, S.E., Minneapolis, Minnesota 55414

Session 208 – Mr. L. Howard Runft, Coordinator, ABC/EE Project, Vocational-Technical Center, 301 S. Grove,
Page 176 Wichita, Kansas 67211

Session 508 – Mr. Rodger Smith, Career Education Resource Teacher, Monterey Peninsula Unified School District,
Page 198 P.O. Box 1031, Monterey, California 93940

– Mr. Lloyd Swanson, Director of Evaluation, Monterey Peninsula Unified School District, P.O. Box 1031, Monterey, California 93940

Session 60[illegible] – Mrs. Betty Jane Hosler, Third Grade Teacher, Bear Creek Elementary School, 2500 Table Mesa Drive,
Page 205 Boulder, Colorado 80303

United States Army and Career Education

Session 305 – Major James E. Austin, Jr., USAFRS/RSAE-120, Randolph Air Force Base, Texas 78148
Page 62

– Commander John D. Davis, U.S. Naval Training Command, Millington, Tennessee 38053

– Lt. William Horan, U.S. Coast Guard, 7402 Vernon Square Drive, Alexandria, Virginia 22306

– Lt. Col. J.M. Keenan, Head, Educational Services Branch, Headquarters, U.S. Marine Corps, Washington, D.C. 20380

– Major Robert E. Russin, U.S. Air Force, Office of Air Force Education, 4403 N. Central Expressway, Dallas, Texas 75205

Using the Armed Services Vocational Aptitude Battery in Career Education

Session 843 – Mr. Grover Diehl, Education Coordinator, U.S. Army Montgomery District Recruiting Command,
Page 161 Building #820, Gunter Air Force Station, Alabama 36119

– Dr. Harry D. Wilfong, Technical Advisor, U.S. Military Enlistment Processing Command, Fort Sheridan, Illinois 60037

CLUSTER B – CAREER EDUCATION, BY FUNCTION

Arts and Humanities in Career Education

Session 442 – Mr. Lou Droftsman, Vice President for Advertising and Design, CBS Broadcasting, 51 W. 52nd Street,
Page 196 New York, New York 10011

– Ms. Dorothy Evans, One Times Square, New York, New York 10036

– Mr. Reynolds Girdler, Jr., Vice President, Binney and Smith, Inc., 380 Madison Avenue, New York, New York 10017

– Mr. R. David Hennick, Sales Representative, Tape Incorporated, 2612 S. Broadway, Green Bay, Wisconsin 54305

– Dr. Phyllis K. Miller, Chairperson, Art Education, College of Education, University of Houston, Houston, Texas 77004

– Dr. Dennis White, Coordinator of Graduate Studies in Art Education, College of Education, University of Houston, Houston, Texas 77004

The Business and Office Occupation Teacher in Career Education

Session 313 – Mrs. Marie McCormick, Supervisor, Career and Business Education, Stratford Secondary Schools,
Page 184 45 N. Parade, Stratford, Connecticut 06497

The Career Education Coordinator

Session 123 – Mr. Odell Melton, Project Director, Career Awareness, Sinclair Elementary, 6410 Grovewood Street,
Page 188 Houston, Texas 77008

Session 225 – Ms. Dee Froemsdorf, Coordinator, Rural Illinois Career Education Service Center, P.O. Box 146,
Page 179 Tamms, Illinois 62988

– Ms. Donna Fuson, Site Director, Career Education Service Center, 500 S. Dwyer, Arlington Heights, Illinois 60005

– Mr. Claude Hinman, Coordinator, Rural Illinois Career Education Service Center, P.O. Box 146, Tamms, Illinois 62988

Session 322 – Mr. Richard Morrison, Assistant Program Director, Career Center, Elkhart Community Schools,
Page 185 Elkhart, Indiana 46514

Session 523 – Ms. Bonnie K. Bothe, Career Education Coordinator, East High Media Center, 4025 J Street,
Page 104 Lincoln, Nebraska 68510

– Ms. Judith Roderick, Coordinator for Career Education, Lincoln High School, 2411 S. 35th Street, Lincoln, Nebraska 68506

Session 621 – Dr. Lawrence Aronstein, 25-C Heritage Drive, New York, New York 10956
Page 118

Session 621 (cont'd.) – Mr. Stanley Gutowski, Assistant Career Education Coordinator, Chautauqua County, Fredonia Stockton Road, Fredonia, New York 14063

– Mr. David Hanks, Assistant Career Education Coordinator, Allegany County Schools, 6 South Street, Belmont, New York 14813

– Ms. Judy Johnson, Career Education Implementer, Mamaroneck School District, Mamaroneck High School, Mamaroneck, New York 10543

– Mr. Kevin Keller, Assistant Career Education Coordinator, Cattaraugus County, South Center–Windfall Road, Olean, New York 14760

– Mrs. Jean Resch, Audio-Visual Technician, Cuba Central School, Cuba, New York 14727

– Ms. Pam Serio, Career Education Coordinator, Allegany County Board of Cooperative Educational Services, 6 South Street, Belmont, New York 14813

Session 821 – Mr. J. Otis Mobley, Consultant, Knott Building, Department of Education, Tallahassee, Florida 32304
Page 226

– Mrs. Pat Parks, Consultant, Department of Education, Route 2, Box 81A, Jasper, Florida 32052

Career Education and the School Administrator

Session 105 – Dr. Grant Venn, Professor of Education, Georgia State University, P.O. Box 49,
Page 23 Atlanta, Georgia 30303

Counselor Educators in Career Education

Session 118 – Mr. Daniel Sullivan, Coordinator, Guidance Project, Northwest Tech, Board of Cooperative
Page 27 Educational Services, Park Street, Ogdensburg, New York 13669

– Mr. Donald S. Tackley, Career Education and Industry Coordinator, Board of Cooperative Educational Services, P.O. Box 1450, Upper Glenwood Road, Binghamton, New York 13902

Session 217 – Dr. Bobby Anderson, Assistant Professor, Career Guidance and Adult Education, University of
Page 185 Alabama, 136 Ullman Towers, University Station, Birmingham, Alabama 35233

– Dr. Leeman Joslin, Professor and Program Chairman, Counseling and Guidance, P.O. Box 2367, University of Alabama, University, Alabama 35486

Session 416 – Dr. Howard H. Splete, Professor of Guidance and Counseling, Wayne State University,
Page 192 323 Education Building, Detroit, Michigan 48202

Session 513 – Dr. John C. Deutscher, Associate Professor of Counseling Education, University of Wisconsin–Stout,
Page 116 Menomonie, Wisconsin 54751

– Dr. Carlyle Gilbertson, Chairman of Counseling and Psychological Services Department, University of Wisconsin–Stout, 1208 River Heights Road, Menomonie, Wisconsin 54751

– Dr. Kenneth Held, UWEX-Statewide Program Leader, University of Wisconsin–Stout, Menomonie, Wisconsin 54751

– Dr. Dale Stehno, Associate Professor of Counseling Education, University of Wisconsin–Stout, Menomonie, Wisconsin 54751

Session 615 – Dr. Eldon E. Ruff, Professor of Education, Indiana University at South Bend, 1825 Northside
Page 115 Boulevard, South Bend, Indiana 46615

Session 716 – Dr. Robert C. Reardon, Director, Curriculum Career Informational Services, CCIS 109 Bryan Hall,
Page 216 Florida State University, Tallahassee, Florida 32306

Session 818 – Mr. George Lulos, Jr., Director of Career Education, Glassboro State College, Bosshart 104,
Page 154 Glassboro, New Jersey 08028

– Mr. Fred Rosi, Director of Career Education, Vineland Public Schools, Vineland Senior High School, 2880 E. Chestnut Avenue, Vineland, New Jersey 08360

The Elementary Language Arts Teacher in Career Education

Session 308 – Ms. Virginia S. Harrison, Teacher, Port St. Joe Elementary School, Long Avenue, Port St. Joe, Florida 32456

The Elementary Math Teacher in Career Education

Session 252 – Mrs. Ann Kelley, Elementary School Principal, Spring-Hill Elementary School, Elba Highway,
Page 64 Troy, Alabama 36081

Session 408 – Ms. Jayne Beckner, Teacher, Lincoln Heights Elementary School, Magee and Lindy Streets,
Page 191 Cincinnati, Ohio 45246

The Elementary Reading Teacher in Career Education

Session 708 – Dr. Diane Gess, Elementary Administrator, Hillcrest School, Addison Boyce Drive,
Page 134 Spring Valley, New York 10901

The Elementary School Counselor in Career Education

Session 216 – Ms. Joyce Phelps, Career Education Coordinator, Monroe County Community School Corporation,
Page 178 315 North Drive, Bloomington, Indiana 47401

Session 517 – Dr. Ellen S. Amatea, Assistant Professor, Department of Counselor Education, Room 100, Norman
Page 103 Hall, University of Florida, Gainesville, Florida 32611

– Mr. Greg Kania, Consultant Trainer, Region IV Education Service Center, P.O. Box 863, Houston, Texas 77001

– Ms. Lila Macaluso, Consultant Trainer, Region IV Education Service Center, P.O. Box 863, Houston, Texas 77001

Session 613 – Ms. Linda Phillips, Career Education Consultant, Pontiac Public Schools, Pontiac, Michigan 48058
Page 71

The Elementary School Principal in Career Education

Session 221 – Mr. John Davies, Principal, Laurel Elementary School, 1401 Laurel Street,
Page 45 Junction City, Oregon 77448

Session 320 – Mr. Ewell Gunter, Principal, Fairhaven School, 14115 N. Fairhaven, Santa Ana, California 92704
Page 64

The Elementary School Teacher in Career Education

Session 406 – Ms. Judith Bloom, Project Resource Teacher, San Diego Unified School District, 4133 Mount
Page 190 Albertine, San Diego, California 92111

– Ms. Florence Johnson, Project Resource Teacher, San Diego Unified School District, 4133 Mount Albertine, San Diego, California 92111

Session 509 – Mr. Vernon Yoshioka, Sixth Grade Teacher, Island City Public School, Route 3, Box 4194,
Page 198 Island City, Oregon 97850

Session 606 – Ms. Doris Benning, Elementary In-Service Coordinator, Division of Curriculum Services, St. Louis
Page 114 City Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Marie Burrow, Director, Career Education, Division of Curriculum Services, St. Louis City Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Susan Katzman, Secondary In-Service Coordinator, Division of Curriculum Services, St. Louis City Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Roberzene Price, Elementary In-Service Coordinator, Division of Curriculum Services, St. Louis City Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Theresa Stockman, Secondary In-Service Coordinator, Division of Curriculum Services, St. Louis City Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

Session 810 – Ms. Joyce McFadden, First Grade Teacher, Dwight D. Eisenhower Elementary School,
Page 224 1450 S. Main Street, Crown Point, Indiana 46307

The Elementary Science Teacher in Career Education

Session 407 – Mrs. Rosemarie James, Teacher, Akron Public Schools, Central-Hower Elementary School,
Page 190 123 S. Forge Street, Akron, Ohio 44304

The Elementary Social Studies Teacher in Career Education

Session 307 – Ms. Sharon Kucinski, Guidance Specialist, Pima County Career Guidance Project, 1000 W.
Page 62 Chapala Drive, Tucson, Arizona 85704

Session 707 – Ms. Kathryn M. Backus, Career Education Specialist, Area Cooperative Educational Services,
Page 133 800 Dixwell Avenue, New Haven, Connecticut 06511

The Foreign Language Teacher in Career Education

Session 514 – Ms. Jane Jackson, Counselor and Foreign Language Teacher, Scioto-Darby City Schools,
Page 116 Hilliard, Ohio 43026

The Home Economics Teacher in Career Education

Session 814 – Ms. Vera Ramsletter, Instructional Consultant, Home Economics, Cincinnati Public Schools,
Page 225 230 E. Ninth Street, Cincinnati, Ohio 45202

The Industrial Arts Teacher in Career Education

Session 311 – Dr. Ronald Bro, Professor of Industrial Technology, University of Northern Iowa,
Page 183 Cedar Falls, Iowa 50613

– Mr. Donald J. Davis, Career Education Consultant, Area Education Agency #16, 305 Avenue F, Fort Madison, Iowa 52627

Session 812 – Dr. Kent Allen, Assistant Professor, College of Education, Room 132, University of Wyoming,
Page 225 Laramie, Wyoming 82071

The Music Teacher in Career Education

Session 511 – Ms. Ruth Ann Angell, Administrative Assistant, Laurelhurst Elementary School, 840 N.E. 41st Street,
Page 101 Portland, Oregon 97232

The Parent in Career Education

Session 119 – Dr. Darryl Laramore, Supervisor, Vocational Education, Montgomery County Public Schools,
Page 27 Room A252, 850 Hungerford Drive, Rockville, Maryland 20850

Session 519 – Ms. Lynne F. Knecht, Career Education Specialist, Area Cooperative Education Services,
Page 199 800 Dixwell Avenue, New Haven, Connecticut 06511

Session 839 – Mr. Mario Herrera, Executive Director, Uptown YMCA, Manhattan, 27-70 Broadway,
Page 41 New York, New York 10004

– Ms. Lisa Sanfilippo, Student, Lafayette High School, Benson and Bay 43rd,
Brooklyn, New York 11223

– Mrs. Rosemarie Siragusa, Education Chairperson, New York State PTA, 10 Breglia Street,
Yonkers, New York 10704

The Post-Secondary School Counselor in Career Education

Session 152 – Dr. Stephen E. Forrer, Director, Career Education for Non-Traditional Students Project,
Page 37 Extended Learning Institute, Northern Virginia Community College, 8333 Little River Turnpike,
Annandale, Virginia 22003

Session 415 – Mr. Richard Oxhandler, Director, Counseling and Guidance for Competency Development Project,
Page 75 Kalamazoo Valley Community College, 6767 W. O Avenue, Kalamazoo, Michigan 49008

The Role of Voluntary Organizations in the Placement Process

Session 704 – Ms. Nancy Garfield, Project Director, Career Education Project, Girl Scouts of the U.S.A.,
Page 132 830 3rd Avenue, New York, New York 10022

The School Board Member in Career Education

Session 223 – Mrs. Margaret Bauman, President, School Board, Warren City Schools, 3101 E. Market Street,
Page 46 Warren, Ohio 44483

– Dr. Robert F. Jackson, President, Toledo School Board of Education, 2406 Robinwood Avenue,
Toledo, Ohio 43620

Session 419 – Mr. Stephen Aiello, Vice President, New York Board of Education, 110 Livingston Street,
Page 79 Brooklyn, New York 11201

– Dr. Amelia Ashe, Member, New York Board of Education, 110 Livingston Street,
Brooklyn, New York 11201

– Mr. George R. Quarles, Chief Administrator for Career and Occupational Education,
22 Vaughn Avenue, New Rochelle, New York 10801

Session 720 – Dr. Chris Chiattas, Career Education Program Coordinator, San Diego City Schools,
Page 137 4100 Normal Street, San Diego, California 92103

– Dr. Ronald L. Detrick, Director, Career Education, San Diego City Schools, 4100 Normal Street,
San Diego, California 92103

– Dr. Phillip Halfaker, Member, Board of Education, San Diego City Schools, 4100 Normal Street,
San Diego, California 92103

– Mrs. Barbara Thomas, Career Education Program Coordinator, San Diego City Schools,
4100 Normal Street, San Diego, California 92103

Session 820 – Ms. Lora L. Chappell, Secretary, Board of Education, 1104 Ellis Avenue, Jackson, Mississippi 39209
Page 156

– Dr. Robert Fortenberry, Superintendent, Board of Education, 1104 Ellis Avenue, Jackson, Mississippi 39209

The Secondary English Teacher in Career Education

Session 112 – Ms. Mary Lou Mendoza, Career Education Coordinator, Northside Independent School District,
Page 170 5900 Evers Road, San Antonio, Texas 78228

– Mrs. Ellen Wilde, Coordinator, Northside Independent School District, 5900 Evers Road, San Antonio, Texas 78228

Session 211 – Mrs. Catherine E. Schwarz, English and Humanities Teacher, Howell High School,
Page 41 Howell, Michigan 48843

Session 512 – Ms. Patricia Peterson, Teacher, Watertown Senior High School, 505 S. 8th Street, Watertown,
Page 199 Wisconsin 53094

– Ms. Rosemary Weyeneth, Teacher, Watertown Senior High School, 505 S. 8th Street, Watertown, Wisconsin 53094

Session 607 – Ms. Annette S. Cage, Teacher, Arab High School, Drawer 456, Arab, Alabama 35016
Page 206

– Mr. Blair Herren, Teacher, Arab High School, Drawer 456, Arab, Alabama 35016

Session 712 – Ms. Louanne Storey, Teacher, Harris County Senior High, P.O. Box 446, Hamilton, Georgia 31811
Page 216

– Ms. Betty W. Whisnant, Secondary Curriculum Coordinator, Harris County Senior High School, P.O. Box 446, Hamilton, Georgia 31811

The Secondary School Counselor in Career Education

Session 414 – Mrs. Myrna MacDonald, Counselor, Carson City High School, P.O. Box 603,
Page 78 Carson City, Nevada 89701

Session 518 – Mr. Jim Dasher, Supervisor, Exemplary Programs, State Department of Education,
Page 199 Little Rock, Arkansas 72201

– Dr. James Golden, Associate Professor of Counselor Education and Psychology, University of Arkansas, Box 867, State University, Arkansas 72467

– Mr. Lee Hines, Counselor, Camden High School, Camden, Arkansas 71701

– Ms. Betty Sue Kell, Junior High Counselor, Marianna School District, Marianna, Arkansas 72360

Session 614 – Ms. Linda Phillips, Career Education Consultant, Pontiac Public Schools, Pontiac, Michigan 48058
Page 208

– Mr. Carl Spencer, Director, Career Education, Lincoln Public Schools, 720 S. 22nd Street, Lincoln, Nebraska 68501

Session 715 – Mr. Tom Frisbie, Guidance Counselor, Oregon Middle School, Oregon Public Schools,
Page 81 456 Perry Parkway, Oregon, Wisconsin 53575

– Mr. Jerry Henning, Guidance Director, Oregon High School, Oregon Public Schools, 456 Perry Parkway, Oregon, Wisconsin 53575

– Mr. Roger Wetzel, Guidance Director, Oregon Public Schools, 456 Perry Parkway, Oregon, Wisconsin 53575

Session 817 – Mr. Norm Brosniak, Chairman, Career Education Department, Asbury Park High School,
Page 226 Sunset Avenue, Asbury Park, New Jersey 07712

– Mr. Tom Frisbie, Guidance Counselor, Oregon Middle School, Oregon Public Schools, 456 Perry Parkway, Oregon, Wisconsin 53575

– Mr. Jerry Henning, Guidance Director, Oregon High School, Oregon Public Schools, 456 Perry Parkway, Oregon, Wisconsin 53575

– Mr. Roger Wetzel, Guidance Director, Oregon Public Schools, 456 Perry Parkway, Oregon, Wisconsin 53575

The Secondary School Principal

Session 222 – Mr. Sam Dubow, Principal, Sault Area High School, No. 1 Educational Plaza,
Page 179 Sault Ste. Marie, Michigan 49783

– Mr. Robert Wiles, Assistant Superintendent for Career Education, Intermediate School District, Sault Ste. Marie, Michigan 49783

The Secondary Science Teacher in Career Education

Session 813 – Mr. Gary Sleep, Seventh Grade Science Teacher, Powell Junior High, Route 2, Box 50,
Page 225 Powell, Wyoming 82435

The Secondary Social Studies Teacher in Career Education

Session 212 – Ms. Julie Jantzi, Chairperson, Social Studies Department, Box 502, Milford Public Schools,
Page 42 Milford, Nebraska 68405

Session 610 – Mr. Phillip E. Powell, Coordinator of Economic, Environmental, and Conservation Education,
Page 207 Arkansas Department of Education, State Education Building, Little Rock, Arkansas 72201

– Mrs. Margaret Thompson, Social Studies Teacher, Kimmons Junior High School, 2201 Waldron Boulevard, Fort Smith, Arkansas 72212

The Superintendent in Career Education

Session 224 – Mr. James F. Cowan, Superintendent, Ventura County Schools, 535 E. Main Street,
Page 46 Ventura, California 93001

– Mr. John Van Zant, Project Director, California Manpower Management Information System, County Office Building, Ventura, California 93001

Session 321 – Dr. M. Robert Adkinson, Superintendent, Ceres Unified School District, P.O. Box 307,
Page 65 Ceres, California 95307

– Ms. Marilyn Hildebrandt, District Evaluator of Career Education, Ceres Unified School District, P.O. Box 307, Ceres, California 95307

Session 420 – Mr. Clyde Muse, Superintendent, Meridian Municipal School District, P.O. Box 31,
Page 193 Meridian, Mississippi 39301

– Mr. Stanley Phillips, Director, Teacher's Center for Social Studies, P.O. Box 31, Meridian, Mississippi 39301

Session 522 – Ms. Shirley Iaquinto, Career Education Project Coordinator, Roosevelt Elementary School District,
Page 200 6000 S. 7th Street, Phoenix, Arizona 85040

Session 522 (cont'd.) – Dr. Russell A. Jackson, Superintendent, Roosevelt Elementary School District, 6000 S. 7th Street, Phoenix, Arizona 85040

– Ms. Janine Saunders, Board of Trustees, Roosevelt Elementary School District, 6000 S. 7th Street, Phoenix, Arizona 85040

Session 619 – Dr. Grant Venn, Professor of Education, Georgia State University, P.O. Box 49, University Plaza, Page 117 Atlanta, Georgia 30303

Supervisors and Directors of Instruction in Career Education

Session 122 – Mr. Ronald Davidoff, Director, Secondary Education, Stow Public Schools, 3732 Darrow Road, Page 171 Stow, Ohio 44224

Session 437 – Dr. Sally Spedding, Principal, Northbrook School, 9080 W. 12 Mile, Southfield, Michigan 48076 Page 194

Session 620 – Mr. Ronald Davidoff, Director, Secondary Education, Stow Public Schools, 3732 Darrow Road, Page 118 Stow, Ohio 44224

– Mrs. Eileen M. Robertson, Commercial Instructor, College of General Studies, University of South Carolina, Columbia, South Carolina 29208

The Vocational Agriculture Teacher in Career Education

Session 608 – Ms. Maryanna Elam, Director, Career Education, Mad River Green Local School District, Page 206 3920 Fairfield Pike, Springfield, Ohio 45502

– Mr. Kenneth R. Fliekman, Vocational Agriculture Instructor, Mad River Green Local School District, 3920 Fairfield Pike, Springfield, Ohio 45502

The Work Experience Educator in Career Education

Session 312 – Dr. Ellen N. Winer, Director, Center for Secondary School Work Experience Education, Page 183 Northeastern University, Stearns Hall, Boston, Massachusetts 02115

CLUSTER C – CAREER EDUCATION, BY SPECIAL POPULATION GROUPS

Career Education: Adults Undergoing Career Change or Retirement

Session 318 – Mr. Allan Dorn, Career Counselor, Arlington High School, 502 W. Euclid Avenue, Arlington Heights,
Page 185 Illinois 60004

– Mr. Bruce Welker, Career Counselor, James B. Conant High School, 700 E. Cougar Trail, Hoffman Estates, Illinois 60194

Session 417 – Dr. John Kennedy, Jr., Coordinating Counselor for Adult Education, Adult Education Resource
Page 39 Center, Roosevelt Public Schools, 10 W. Pennywood Avenue, Roosevelt, New York 11575

Session 819 – Ms. Vera Hannenberg, Project Coordinator, Office of Planning, Research, and Evaluation, New York
Page 155 City Board of Education, 110 Livingston Street, Brooklyn, New York 11201

– Dr. Patrick J. Montana, President, National Center for Career/Life Planning, 9480 Ridge Boulevard, Brooklyn, New York 11209

– Mrs. Francine Vernon, President, New York City Board of Education, 110 Livingston Street, Brooklyn, New York 11201

– Ms. Helen Weinberg, Coordinator of Adult Education, New York City Board of Education, 110 Livingston Street, Brooklyn, New York 11201

Career Education: Black Americans

Session 132 – Mr. George Guthrie, Supervising Vice Principal and MCEP Project Director, Grant High School,
Page 173 2245 N.E. 36th Avenue, Portland, Oregon 97212

Session 233 – Ms. Delores Cooper, Career Education Coordinator, Cleveland Public Schools, 27621 Chagrin #317,
Page 49 Cleveland, Ohio 44122

Career Education: The Dropout

Session 633 – Mr. William Jackson, Vocational Counselor, Elk Grove High School, 500 W. Elk Grove Boulevard, Elk Grove, Illinois 60007

Career Education: The Economically Disadvantaged

Session 234 – Mr. Doyce Howard, Secondary Staff Trainer, Jefferson County Public Schools, 703 Braddock Drive,
Page 50 Louisville, Kentucky 40207

– Mrs. Barbara Preli, Director, Career Education Office, Jefferson County Public Schools, Brown Education Center, Room 1032, Louisville, Kentucky 40202

– Ms. Donna Rehbeck, Middle Staff Trainer, Jefferson County Public Schools, Brown Education Center, Room 1032, Louisville, Kentucky 40202

– Ms. Carol Schweisgath, Elementary Staff Trainer, Jefferson County Public Schools, Brown Education Center, Room 1032, Louisville, Kentucky 40202

Session 421 – Mr. Robert Fesler, Career Education Coordinator, Abraham Lincoln High School, 343 Countyview
Page 80 Drive, Mill Valley, California 94941

– Ms. Lucinda Kindred, Consultant, Industry-Education Council of California, Old Bay Shore, Burlingame, California 94010

– Dr. Armand Magid, Career Education Coordinator, Woodrow Wilson High School, 400 Manfell Street, San Francisco, California 94122

Session 731 – Ms. Catherine Batsche, Director, Handicapped and Disadvantaged Program, Sauk Area Career
Page 219 Center, 138th and Crawford, Crestwood, Illinois 60472

– Ms. Rita Kalfas, Consultant, Special Programs Unit, DOTE, 160 N. LaSalle, Room 1727, Chicago, Illinois 60601

– Mr. Felix Winslow, Project Director for the Handicapped and Disadvantaged, Tilden High School, 4747 S. Union Avenue, Chicago, Illinois 60609

Career Education: The Gifted and Talented

Session 430 – Dr. Frances Karnes, Assistant Professor, Department of Special Education, University of Southern
Page 84 Mississippi, Southern Station, Box 207, Hattiesburg, Mississippi 39401

Session 534 – Mr. David Wasson, Curriculum Specialist, Mohave County Career Education, 515 W. Beale,
Page 201 Kingman, Arizona 86401

Session 544 – Mr. Ralph Edwin Hogan, Sr., Director, Governor's Honors Program, Georgia Department of
Page 203 Education, State Office Building, Room 220, Annex Building, Atlanta, Georgia 30334

Session 632 – Dr. Paul Torrance, Head, Educational Psychology Department, Research and Measurement,
Page 123 University of Georgia, 185 Riverhill Drive, Athens, Georgia 30601

Session 643 – Dr. Dorothy Sisk, Director, Office of the Gifted and Talented, Department of Health, Education,
Page 124 and Welfare, Room 2100, Seventh and D Streets, S.W., Washington, D.C. 20202

Session 730 – Mr. Joseph R. Ellis, Professor of Education, College of Education, Northern Illinois University,
Page 218 DeKalb, Illinois 60115

– Ms. Marilyn Meissner, Director, Joe Ellis Area Service Center for the Gifted, 301 W. South Street, Arlington Heights, Illinois 60005

Session 840 – Dr. Robert Brooks, Manpower Administrator, Providence School System, 145 Stonedale Road,
Page 161 Warwick, Rhode Island 02889

– Ms. Karen Lee Carroll, Project Director, Center for Career Education in the Arts, 131 10th Street, Providence, Rhode Island 02906

– Mr. Joseph Dailey, Coordinator, Special Education Vocational Training, Cumberland School District, 9 Rocky Crest Road, Cumberland, Rhode Island 02864

– Mr. James E. Sullivan, President, Rhode Island Education Association and Coordinator of Career Education, Cumberland Schools Administration Building, Meriden Road, Cumberland, Rhode Island 02864

Career Education: The Incarcerated

Session 334 – Mr. William F. Kennedy, Educational Programs Coordinator, Oregon Department of Corrections,
Page 69 2575 Center Street, N.E., Salem, Oregon 97310

Session 334 (cont'd.) – Ms. Marilyn Mathias, Educational Technician, Maryland Department of Corrections, 6314 Windsor Mill Road, Baltimore, Maryland 21207

– Mr. William E. Monroe, Career Education Coordinator, Project FORCE, Texas Department of Corrections, P.O. Box 40, Huntsville, Texas 77340

Session 431 Page 86 – Mr. Edward Johnson, Director, Human Resources Development, Career Counseling Project, Stateville Corrections Institute, Joliet, Illinois 60435

– Mr. William Monroe, Career Education Coordinator, Windham School District, Texas Department of Corrections, Huntsville, Texas 77340

– Mr. Bernard Quigley, Regional Vocational Director, Illinois Office of Education, 100 North Street, Springfield, Illinois 62771

– Mr. J.D. Ross, Associate Dean of Special Programs, Joliet Community College, 2221 A Cottonwood Road, Joliet, Illinois 60432

Career Education: Migrant Workers

Session 535 Page 107 – Mr. James Crook, Director, Yakima Migrant Career Education Program, 104 N. 4th Avenue, Yakima, Washington 91699

Career Education for Young Adults

Session 219 Page 178 – Mr. Dominic Di Orio, Jr., Director, Vocational Education, West Warwick School Department, 300 Providence Street, West Warwick, Rhode Island 02893

– Mrs. Clare Lavallee, Placement Director, 2000 Pawtucket Avenue, East Providence, Rhode Island 02914

Career Education: Practices in Special Education

Session 130 Page 30 – Mr. Robert Cain, Manager, Project Development and Educational Assessment, RCA Education Services, Building 202-1, Cherry Hill, New Jersey 08101

– Dr. Laverne Cook, Project Manager, RCA Education Services, 509 Lee Street, E., Charleston, West Virginia 25301

– Ms. Diana Frazier, Program Specialist, RCA Education Services, 509 Lee Street, E., Charleston, West Virginia 25301

Session 331 – Mr. Grady Doster, Teacher, Atlanta Area School for the Deaf, 890 N. Indian Creek Drive, Clarkston, Georgia 30021

Session 428 Page 83 – Mrs. Margaret C. Baird, Principal, Thomas Jefferson High School, 63 Sterling, Brooklyn, New York 11225

– Mr. Byrd Drucker, Director, The Alternate School, Thomas Jefferson High School, 1203 E. 84th Street, Brooklyn, New York 11236

– Mrs. Francis Yauch, Coordinator of Career Education for Handicapped Students, New York Board of Education, 110 Livingston Street, Brooklyn, New York 11201

Session 533 – Ms. Robin Cooley, 2120 Big Bend Road, Cape Girardeau, Missouri 63701

Session 630 – Ms. Judy Comer, Program Specialist, Cobb County Schools, P.O. Box 1088, Marietta, Georgia 30060
Page 210

– Mr. Don Hogan, Coordinator, Division of State Schools, Department of Education, 132 State Office Building, Atlanta, Georgia 30334

– Ms. DeeDee Holmes, Program Specialist, Forest Park Senior High School, 5452 Phillips Drive, Forest Park, Georgia 30050

– Ms. Gail Warren, Program Specialist, Jonesboro High School, 7728 Mt. Zion Boulevard, Jonesboro, Georgia 30236

Session 729 – Mr. Jack Sappington, Administrator, Special Programs, Orange Unified School District,
Page 85 Orange, California 92667

Career Education: Spanish-Speaking Americans

Session 138 – Mr. Ernest Andrade, Coordinator of Bilingual Education, Weld County School District #6, Greely, Colorado 80631

Career Education: Women in the World of Work

Session 131 – Mrs. Beth Gurrister, Chairman, Governor's Commission on Status of Women and Families in Utah,
Page 30 169 N. 8th East, Brigham City, Utah 84302

– Ms. Phyllis R. Snow, Professor and Dean, College of Family Life, Utah State University, 1466 E. 8th North, Logan, Utah 84322

Session 332 – Ms. Mary Teresa Soper, Social Worker, Women's Center, Northern Michigan University,
Page 61 Fenton, Michigan 48430

Session 429 – Dr. Terry Denny, Professor of Education, 260 C, Education Building, University of Illinois,
Page 84 Urbana, Illinois 61801

– Ms. Irma Godlin, Coordinator, Career Guidance Resource Center, 201 E. 21st Street, New York, New York 10010

– Ms. Daisy K. Shaw, Director of Educational and Vocational Guidance, Board of Education, 110 Livingston Street, Room 418, Brooklyn, New York 11201

Session 828 – Mrs. Josie Heath, Director of Women's Center, Community College of Denver, Red Rock Campus,
Page 158 12-600 W. 6th Avenue, Golden, Colorado 80401

– Dr. Dorothy Lawrence, Dean of Occupational Studies, Community College of Denver, Red Rock Campus, 12-600 W. 6th Avenue, Golden, Colorado 80401

CLUSTER D – EDUCATIONAL SKILLS AND APPROACHES

Atlanta School Without Walls: Career Education Program

Session 809 – Mr. Milton Lincoln, Associate Director of Public Affairs, Atlanta Chamber of Commerce,
Page 153 P.O. Box 1740, Atlanta, Georgia 30301

– Mr. J. Frank Smith, President, Computer Management, Incorporated, and Chairman, Educational Task Force, Atlanta Chamber of Commerce, P.O. Box 1740, Atlanta, Georgia 30301

– Mr. Edwin Thompson, Jr., Administrator and Liaison to Atlanta School without Walls, 224 Central Avenue, S.W., Atlanta, Georgia 30303

Career Awareness as an Element of Career Education

Session 546 – Ms. June Mabe, Awareness Coordinator, Raleigh County Schools, 105 Adair Street,
Page 204 Beckley, West Virginia 25801

Career Counseling and Placement of College Graduates

Session 104 – Mr. Robert C. Becker, Assistant Vice President, The Mellon Bank, Past President, College Placement
Page 20 Council, Inc., 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

– Dr. Alva C. Cooper, Staff Consultant, College Placement Council, Inc., 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

– Mr. Frank M. Hallgren, President, College Placement Council, 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

– Mr. Robert F. Herrick, Executive Director, College Placement Council, Inc., 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

– Mrs. Jean G. Kessler, Administrative Coordinator, College Placement Council, Inc., 65 E. Elizabeth Avenue, Bethlehem, Pennsylvania 18018

Career Decision-Making Programs

Session 142 – Ms. Janet Cornfeld, Instructor, Counseling and Personnel Services, University of Maryland,
Page 33 College Park, Maryland 20742

– Ms. Judith B. Trichton, Assistant Director, Career Development Center, University of Maryland, College Park, Maryland 20742

– Ms. Loretta Wertheimer, Graduate Assistant, Career Development Center, University of Maryland, College Park, Maryland 20742

Session 244 – Mr. Cecil Benjamin, Principal, Samuel Gompers Vocational and Technical High School,
Page 52 455 Southern Boulevard, Bronx, New York 10455

– Ms. Clara Blackman, Assistant Director, Bureau of Educational and Vocational Guidance, New York Board of Education, 110 Livingston Street, Brooklyn, New York 11201

Session 244 (cont'd.) – Mr. Burton Goodman, Coordinator, High School Continuum Program, New York Board of Education, 110 Livingston Street, Brooklyn, New York 11201

– Mr. Gilbert Lopez, Project Director, School of Education, University of Massachusetts, Amherst, Massachusetts 01003

– Mr. Norman Shapiro, Principal, George Westinghouse Vocational and Technical High School, 105 Johnson Street, Brooklyn, New York 11201

– Mr. George Shirkey, Principal, Manhattan Vocational and Technical High School, 320 E. 96th Street, New York, New York 10028

Session 343 – Ms. Frances M. Gidney, Vocational Counselor, Proctor Hug High School, 2880 Sutro Street,
Page 70 Reno, Nevada 89502

– Mr. Eddie Jo McCay, Coordinator, Cooperative Vocational Education, Proctor Hug High School, 2880 Sutro Street, Reno, Nevada 89502

– Ms. Sandra Lee Slawnik, Business Department Teacher, Proctor Hug High School, 2880 Sutro Street, Reno, Nevada 89502

Session 545 – Ms. Rosella Bannister, Director, Michigan Consumer Education Center, Eastern Michigan Union,
Page 203 217 "A" University Library, Ypsilanti, Michigan 48197

– Ms. Alva Mallory, Director, Vocational Education and Career Development Services, Genessee Intermediate District, 2413 W. Maple Avenue, Flint, Michigan 48507

Session 645 – Dr. Susan Jones-Sears, Career Education Director, Scioto-Darby City Schools,
Page 125 5398 Scioto-Darby Road, Hilliard, Ohio 43026

– Dr. Gordon Miller, Program Service Officer, College Entrance Examination Board, 888 7th Avenue, New York, New York 10019

– Dr. Joseph J. Quaranta, 1945 N. High Street, Columbus, Ohio 43210

Career Exploration: An Element in Career Education

Session 146 – Mrs. Yvonne Ferguson, #1 Timmy Court, Milton, West Virginia 25541

– Mr. David Groves, Acting Director for Vocational, Technical, and Adult Education, Cabell County Career Center, 2800 5th Avenue, Huntington, West Virginia 25702

Session 745 – Dr. Marion Asche, Professor of Vocational and Technical Education, Virginia Polytechnic Institute,
Page 144 Blacksburg, Virginia 24061

– Ms. Mary Lee Childs, Coordinator, Vocational Academic Education, Central High School, East Pinetree Boulevard, Thomasville, Georgia 31792

– Mr. John R. Clark, Title III Coordinator, Thomas County School System, Thomasville, Georgia 31792

– Mr. Joseph P. Davis, Teacher Training, University of Georgia, P.O. Box 8067, Athens, Georgia 30601

Career Education and the Department of Labor's Occupational Information and Development System

Session 538 – Ms. Norma Ausmus, Supervisory Manpower Analyst, U.S. Department of Labor,
Page 110 601 D Street, N.W., Room 104, Washington, D.C. 20213

– Dr. Bruce McKinlay, Director, Oregon National Occupational Information Service, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403

Session 538 (cont'd.) – Mr. Steve Wall, Assistant Director, Washington Occupational Information Service, 608 Evergreen Plaza, Olympia, Washington 98501

Career Education and Experiential Education

Session 647 – Mr. Gordon L. Ray, Director, Career Education, Salinas Union High School District, 2131 W. Alisal
Page 214 Street, Salinas, California 93901

Career Education and the Field Trip–K-6

Session 147 – Ms. Doris Benning, Staff Developer, Career Education Department, St. Louis Public Schools,
Page 175 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Mrs. Marie Burrow, Director, Career Education Department, St. Louis Public Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Susan Katzman, Staff Developer, Career Education Department, St. Louis Public Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Roberzene Price, Staff Developer, Career Education Department, St. Louis Public Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

– Ms. Theresa Stuckman, Staff Developer, Career Education Department, St. Louis Public Schools, 1517 S. Theresa Avenue, St. Louis, Missouri 63104

Career Education and the Field Trip: K-12

Session 239 – Ms. Janet Shelver, Director, Career Education, Department of Education, Cultural Affairs,
Page 180 Career Education Office Building, Pierre, South Dakota 57501

– Mr. William Smith, Student Coordinator for the Career Competency Program, Huron Public Schools, Huron, South Dakota 57350

Session 636 – Ms. Bessie Etheridge, Director, Career Development, Office of Career Development,
Page 123 Washington, D.C. Public Schools, 415 12th Street, N.W., Washington, D.C. 20009

Career Education and the Field Trip: 7-12

Session 137 – Ms. Barbara DeVoss, Community Resources Coordinator, Dallas Independent School District,
Page 174 3700 Ross Avenue, Dallas, Texas 75204

– Mr. Trusse Norris, Coordinator, Career Exposure Task Force, Los Angeles City Schools, 404 S. Bixel Street, Los Angeles, California 90017

Session 338 – Ms. Frances Smith, Career Education Instructional Assistant, Richardson School System,
Page 187 400 S. Greenville Avenue, Richardson, Texas 75080

Session 637 – Mr. Trusse Norris, Coordinator, Career Exposure Task Force, Los Angeles City Schools,
Page 212 404 S. Bixel Street, Los Angeles, California 90017

– Ms. Lethia Smith, Projects Coordinator, Los Angeles City Schools, 555 S. Flower Street, Los Angeles, California 90017

Career Education and the News Media

Session 644 – Mrs. Debravild McGlohan, State Coordinator for Career Education, Department of Public
Page 125 Instruction, Education Building, Raleigh, North Carolina 27611

– Dr. A. Craig Phillips, State Superintendent for Public Instruction, Education Building, Raleigh, North Carolina 27611

Career Education Practices Using the Newspaper

Session 241 – Ms. Carolyn Magnuson, Counselor, University of Missouri at Columbia, 207 Education,
Page 181 Columbia, Missouri 65201

– Ms. Marcia A. Witte, Media Consultant, University of Missouri at Columbia, HIP Project, Room 20, Columbia, Missouri 65201

Session 441 – Ms. Lois Avery, Tour Guide, Houston Chronicle, 801 Texas Avenue, Houston, Texas 77002
Page 194

– Ms. Rosemary Wohlfort Gendusa, 4747 Southwest Freeway, Houston, Texas 77001

– Mr. Roger Melton, Career Education Component Consultant, Region X Education Service Center, P.O. Box 1300, Richardson, Texas 75080

Session 740 – Ms. Marilyn Olson, Career Education Specialist, Lane Intermediate Educational District,
Page 220 1200 Highway 99N, Eugene, Oregon 97402

Career Education Resource Center in Community College

Session 739 – Mr. Clyde Reyes, Director, Career Center, West Valley College, 14000 Fruitvale,
Page 220 Saratoga, California 95070

Career Education Resource Center (K-12)

Session 240 – Ms. Bonnie Giffin, Counselor, Southeast Oakland Vocational Educational Center, 5055 Delemere,
Page 180 Royal Oak, Michigan 48073

– Mr. James Stiles, Counselor, Harry Hills High School, 5815 Wise Road, Lansing, Michigan 48910

Session 438 – Ms. Jane Davis, Coordinator, Career Education Project, Lexington Public Schools,
Page 194 909 N. Washington, Lexington, Nebraska 68850

– Mr. Jim White, Jr. High Counselor, Lexington Public Schools, 909 N. Washington, Lexington, Nebraska 68850

Session 542 – Mr. Gene Quilling, Counselor, Alexander Ramsay Sr. High, 1261 West Highway 36,
Page 203 Roseville, Minnesota 55818

Session 638 – Mr. Dave Pullias, Career Education Coordinator, Richardson Independent School District,
Page 212 400 S. Greenville Avenue, Richardson, Texas 75081

Session 738 – Mr. C.M. Miller, 1801 W. Vesper, Blue Springs, Mississippi 38828

Session 844 – Mr. Gary Ford, Career Center Coordinator, Walter Johnson High School, 6400 Rock Spring Drive,
Page 43 Bethesda, Maryland 20014

– Mrs. Terrill Gormly, Teacher Specialist, Intern Programs, Montgomery County Public Schools, 850 Hungerford Drive, Rockville, Maryland 20850

– Mrs. Lois Parker, Coordinator, Career Education, Montgomery County Public Schools, 850 Hungerford Drive, Rockville, Maryland 20850

– Mr. Gerry Woofter, Specialist, Executive Intern of America Project, Montgomery County Public Schools, 850 Hungerford Drive, Rockville, Maryland 20850

College Venture Programs: A 13-College Career Education Effort

Session 304 – Dr. Paul Dube, Director, Center for Cooperative Education, Northeastern University,
Page 61 Boston, Massachusetts 02115

– Mr. Charles E. Shain, Director, Institute for Off-Campus Experience and Cooperative Education, Northeastern University, Boston, Massachusetts 02115

Competency-Based Career Education

Session 443 – Mr. Carl Arko, Box 70, Gladstone, Michigan 49837
Page 90

– Mr. Arthur Miller, Assistant Superintendent for Instruction, Rockford Public Schools, Rockford, Michigan 49341

Curriculum-Infusion Approaches to Career Education: K-12

Session 135 – Dr. Maxine F. Carr, Assistant Professor of Counseling, Florida Technological University, Box 25000,
Page 32 Orlando, Florida 32816

Session 237 – Ms. Jan Dickson, 1727 Mary Circle, Salt Lake City, Utah 84121
Page 51

– Dr. Stanley Leavitt, Director, Career Education, Alpine School District, 940 South 100 East, Orem, Utah 84057

– Mr. Joe O. Luke, Industrial Arts Specialist, Utah State Board of Education, 578 East 1650 South, Bountiful, Utah 84010

Session 336 – Ms. Janice Eaton, Curriculum Coordinator, Project CAP (Career Awareness Program), Box 13,
Page 187 Greeland, Arkansas 72737

– Ms. Mary Gunter, Curriculum Coordinator, Project CAP (Career Awareness Program), Box 13, Greeland, Arkansas 72737

– Ms. Jeanne Lefler, Director, Project CAP (Career Awareness Program), Box 13, Greeland, Arkansas 72737

– Mrs. Jo McClure, Deputy Evaluator, Project CAP (Career Awareness Program), Box 13, Greeland, Arkansas 72737

Session 435 – Mr. Wayne Childs, Third Grade Teacher, Westside Elementary School, Springville, Utah 84663
Page 88

– Mrs. Deon Jensen, Career Education Specialist, Utah State Department of Public Instruction, 250 East Fifth South, Salt Lake City, Utah 84111

– Dr. Ray Warner, Director of Career Education, Nebo School District, 50 South Main, Spanish Fork, Utah 84660

Session 512 – Ms. Patricia Peterson, Teacher, Watertown Sr. High School, 505 S. 8th Street,
Page 199 Watertown, Wisconsin 53094

– Ms. Rosemary Weyeneth, Teacher, Watertown Sr. High School, 505 S. 8th Street, Watertown, Wisconsin 53094

Session 540 – Dr. Ronald Davis, Project Director, Articulated Career Guidance Project, Rochester City Schools,
Page 202 410 Alexander, Room 130, Rochester, New York 14607

Session 540 – Dr. E. McMahon, Assistant Dean, Rosary Hill College, Snyder, New York 14226
(cont'd.)

– Mr. Francis Orlando, Principal, Owego North Elementary School, George Street, Owego, New York 13827

– Dr. Alfred Schutte, Supervisor, Secondary Science, Wantagh High School, Beltagh Avenue, Wantagh, New York 11793

Session 651 – Mrs. Thelma Daley, Career Education Specialist, Baltimore County Public Schools,
Page 126 Towson, Maryland 21209

– Ms. Nannell Grube, Counselor, Anne Arundel Public Schools, 1 Nancy Avenue, Millersville, Maryland 21108

– Mr. Robert V. Jervis, Coordinator, Career Education, Anne Arundel Public Schools, 2644 Riva Road, Annapolis, Maryland 21401

– Mr. Robert Smith, Social Studies Teacher, MacArthur Junior High School, Fort George Meade, Maryland 20755

Session 735 – Mr. Howard R. Hammond, Consultant, Career Education Teacher, Iowa Department of Public
Page 219 Instruction, Grimes State Office Building, East 14th and Grand Avenue, Des Moines, Iowa 50319

– Dr. Lonnie Timmermen, Professor, Education, College of Education, Drake University, Des Moines, Iowa 50311

Session 835 – Mr. Duane Altig, Teacher, 310 N.E. One Hundred Forty Seventh Street, Portland, Oregon 97230
Page 162

Effectiveness of Commercial Career Education Methods

Session 750 – Mr. Robert Brennan, Executive Director, Greater Madison Chamber of Commerce,
Page 147 615 East Washington Avenue, Madison, Wisconsin 53703

– Mr. George Maki, Principal, Marquette Middle School, 510 S. Thornton Avenue, Madison, Wisconsin 53703

– Mr. Eugene Sturdevant, Principal, Lakeview Elementary School, 1802 Tennyson Lane, Madison, Wisconsin 53704

Evaluating Process and Product in Career Education

Session 144 – Ms. Carol M. Aslanian, Assistant Director for Career Education, Policy Studies in Education,
Page 35 475 Park Avenue S., New York, New York 10016

Session 650 – Mr. Gerald Johnson, Project Director, Project Future, Bremerton School District 100-C,
Page 71 Bremerton, Washington 98310

Experience-Based Career Education

Session 141 – Mr. Willard E. Downham, Jr., Assistant High School Principal and Career House Leader,
Page 194 Washington Township High School, Hinffville Crosskeys Road, Sewell, New Jersey 08080

Session 242 – Dr. Ronald Buchnam, Senior Associate, National Institute of Education,
Page 51 1200 19th Street, N.W., Washington, D.C. 20208

– Dr. Charles Denova, Manager of Employee Training, Aircraft Division, Northrop Corporation, 3901 W. Broadway, Hawthorne, California 90250

Session 242 (cont'd.) – Mr. Ted Kimbrough, Administrator, Career Education, Los Angeles Unified School District, 450 North Grand Avenue, A431, Los Angeles, California 90012

– Mr. Jack Mannion, Vice President for Public Affairs, Northrop Corporation 1001/31, 3901 W. Broadway, Hawthorne, California 90250

– Mr. Everett McDonough, Jr., Vice President for Public Affairs, Security Pacific National Bank, 333 S. Hope Street, Los Angeles, California 90071

Session 642 Page 213 – Dr. George Cunningham, Superintendent of Schools, Portland Board of Education, 264 Main Street, Portland, Connecticut 06480

– Mr. David Dole, Project Director, Portland Sr. High School, 95 High Street, Portland, Connecticut 06480

– Mr. David MacLean, Site Analyst, Portland Sr. High School, 95 High Street, Portland, Connecticut 06480

– Mr. Laurence Tiven, Assistant Superintendent of Schools, Portland Board of Education, 264 Main Street, Portland, Connecticut 06480

Session 741 Page 221 – Dr. Lynn Jenks, Director, Materials Development, Far West Laboratory for Educational Research and Development, 1855 Folsom Street, San Francisco, California 94103

Illinois Comprehensive Occupational Information Demonstration Center Project

Session 748 Page 146 – Mr. Tom Boldery, Director, Comprehensive Illinois Occupational Information Demonstration Center Project, Central High School, 201 E. Jefferson, Joliet, Illinois 60432

– Ms. Dorothy Lawson, Director of Career Education, Curriculum Development Project, Eastern Illinois University, 1024 Colony Lane, Charleston, Illinois 61920

– Mr. Willis Shay, Director, Vocational Education, Central High School, 201 E. Jefferson, Joliet, Illinois 60432

Implementing Career Education, K-12

Session 549 Page 205 – Ms. Pearl Krueger, Career Education Coordinator, District 12, 708 E. Tremont Avenue, Bronx, New York 10457

– Mr. Michael T. Quinn, Coordinator, Open Doors Career Education Project, 20 W. 40th Street, New York, New York 10010

– Mr. Roy Sapin, Curriculum Specialist, District 18 Office, 545 Utica Avenue, Brooklyn, New York 11203

– Mrs. Winell Thomas, Open Doors Career Education Project, 20 W. 40th Street, New York, New York 10010

– Ms. Juanita O. Ward, Project Director, Open Doors Career Education Project, 20 W. 40th Street, New York, New York 10018

Individualized Instruction Practices in Career Education

Session 640 Page 124 – Mrs. Maxine Walker, Consultant Coordinator, Alice Independent School District, 200 N. Reynolds, Alice, Texas 78332

Job Acquisition and Retention Skills Programs

Session 143 – Dr. Dale Brooks, Area Director, Central Kansas Area Vocational-Technical School,
Page 34 P.O. Box 545, Newton, Kansas 67114

– Mr. Brooke Collison, Assistant Professor of Counselor Education, Wichita State University, Box 28, Wichita, Kansas 67208

– Mr. Nelson Gallie, General Manager, Hesston Corporation, Hesston, Kansas 67062

– Ms. Mary W. Kosier, Project Coordinator of the Career Education Program, Central Kansas Area Vocational-Technical School, P.O. Box 545, Newton, Kansas 67114

Session 245 – Ms. Connye Barrow, Career Awareness Program Coordinator, Triton College, 2000 5th Avenue,
Page 181 River Grove, Illinois 60171

Session 344 – Dr. Bela H. Banathy, Program Director, Far West Laboratory for Educational Research and
Page 71 Development, 1855 Folsom Street, San Francisco, California 94103

– Ms. Dru S. Robinson, Project Coordinator, Far West Laboratory for Educational Research and Development, 1855 Folsom Street, San Francisco, California 94103

Session 842 – Mr. Walter Gembica, Consultant, Career Education, Los Angeles County Education Center,
Page 228 9300 E. Imperial Highway, Downey, California 93042

– Mr. John Van Zant, Director of California Manpower Management Information System, County Office Building, Ventura, California 93001

Job Placement Practices in Career Education

Session 218 – Mr. G. Patrick Feeley, Career Education Coordinator, Office of Superintendent of Public
Page 178 Instruction, State Capitol, Helena, Montana 59601

Session 616 – Ms. Susan Kosmo, Research Specialist, Wisconsin Vocational Studies Center, University of
Page 116 Wisconsin, Old Education Building, Room 321, Madison, Wisconsin 53558

– Mr. Paul Speight, Supervisor of Special Projects in Vocational Education, Wisconsin Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702

– Mr. Peter Van Ness, Field Consultant, Job Service Wisconsin, 201 E. Washington Avenue, Madison, Wisconsin 53703

Session 717 – Mr. Raymond Wasil, Director, Ohio Career Guidance Continuum, State Department of Education,
Page 136 65 South Front Street, Room 1005, Columbus, Ohio 43215

Learning Centers and Career Education

Session 445 – Mr. Ralph Burke, Director of Instruction, Skyline Career Development Center, 7777 Forney Road,
Page 116 Dallas, Texas 75227

– Mr. Weldon Griffith, Manager, Skyline Career Development Center, 7777 Forney Road, Dallas, Texas 75227

Session 838 – Mrs. Doris West, Career Education Consultant, Region XI Education Service Center,
Page 160 2821 Cullen Street, Fort Worth, Texas 76107

Mobile Units in Career Education

Session 339 – Mr. Jeffrey Dietz, Supervisor, Career Vocational Programs, Missoula County High School,
Page 188 915 South Avenue West, Missoula, Montana 59801

Session 543 – Mr. Jim Coffey, State Superintendent, Indiana Career Resource Project, 1205 S. Greenlawn Avenue, South Bend, Indiana 44615
Page 111

– Dr. Gerald O. Dudley, Project Director, Indiana Career Resource Center, 1201-09 S. Greenlawn Avenue, South Bend, Indiana 46615

– Ms. Nancy Harris, Director, State Planning Grant Department, Pupil Personnel Division, Department of Public Instruction, Indianapolis, Indiana 46222

– Ms. Gina Lubek, Career Resource Project, Indiana Vocational Technical College, Evansville, Indiana 47713

– Mr. James Meuninck, Career Education Consultant, Indiana Career Resource Project, 1202 South Greenlawn Avenue, South Bend, Indiana 46615

– Mr. Paul Smith, Career Education Consultant, Indiana Career Resource Project, 1205 South Greenlawn Avenue, South Bend, Indiana 46615

Session 639 – Mr. Ken House, Resource Facilitator, Career Occupational Resource Center, Meridian School District #101, Mounds, Illinois 62964
Page 75

– Mr. Robert Komerech, Director, Career Occupational Resource Center, Meridian School District #101, Mounds, Illinois 62964

Needs Assessment Procedures in Career Education

Session 250 – Mr. James Augustin, Evaluation Specialist, Wisconsin Vocational Studies Center, 321 Education Building, Box 49, Madison, Wisconsin 53706
Page 182

– Dr. Orville Nelson, Co-Director, Center for Vocational, Technical, and Adult Education, University of Wisconsin–Stout, Menomonie, Wisconsin 54715

Session 348 – Ms. Debbie Vild McGlohon, State Coordinator of Career Education, North Carolina Department of Public Instruction, Room 504, Education Building, Raleigh, North Carolina 27611
Page 73

Session 449 – Mr. John Bailey, EPIC Assistant Director, Vocational Division, 1501 Yancey Street, Tallahassee, Florida 33319
Page 92

– Mr. Bill Ripley, Career Education Coordinator, Orange County Schools, 410 Woods Avenue, Orlando, Florida 32803

Session 749 – Dr. Elvis Arterbury, Project Director, Partners in Career Education, 1201 N. Watson Road, Suite 130, Arlington, Texas 76011
Page 221

– Mr. Keith L. Cruse, Director of Assessment, Texas Education Agency, 201 E. 11th Street, Austin, Texas 78701

– Mr. Marvin Veselka, Director of Evaluation, Texas Education Agency, 201 E. 11th Street, Austin, Texas 78701

Session 849 – Ms. Carolyn Corine, Research Associate, Southern Illinois University, Edwardsville, Illinois 62025
Page 229

– Dr. Dean Gray, Associate Professor, Education Department, Southern Illinois University, Box 113, Edwardsville, Illinois 62025

– Mr. Fred Henrichs, Research Associate, Southern Illinois University, Edwardsville, Illinois 62025

– Mr. Robert Komerech, Director, Career Occupational Resource Center, Southern Illinois University, Edwardsville, Illinois 62025

Session 849 (cont'd.) – Dr. Jon Marshall, Director, Evaluative Research Associates, Inc., 8444 Florissant Road, Suite 207, St. Louis, Missouri 63121

Occupational Information Systems: Their Importance in Career Education

Session 807 – Dr. Bruce McKinlay, Director, Career Information System, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403
Page 151

Planning, Evaluating, and Expanding Career Education: A State Effort

Session 631 – Mr. Lewis G. Harriman, Jr., Vice President, Manufacturers and Traders Trust, 1 Manufacturers and Traders Plaza, Buffalo, New York 14240
Page 122

– Ms. Annie B. Martin, Director, Careers for Occupational Safety and Health, Health Care Institute, 326 W. 42nd Street, New York, New York 10036

– Mr. David E. Smith, Director, Apprenticeship Department, Joint Industry Board of Electrical Industries, 158-11 Jewel Avenue, Flushing, New York 11365

– Mr. Wallace M. Wog, Executive Director, New York State Advisory Council on Vocational Education, 99 Washington Avenue, Room 1610, Albany, New York 12230

Prime-Time Television for Career Education

Session 403 – Mrs. Anita Klever, Program Hostess and Co-Producer, "What Do You Do?", KYW Television, Independence Mall East, Philadelphia, Pennsylvania 19106
Page 76

Planning and Managing a Career Information Center

Session 227 – Mr. Melvin Mungin, Coordinator, Bronx Career Counseling and Resource Center, 1030 A Southern Boulevard, Bronx, New York 10459
Page 126

– Ms. Ofelia Sealey, Coordinator, Bronx Career Counseling and Resource Center, 1030 A Southern Boulevard, Bronx, New York 10459

Session 324 – Mr. Jack DeTaloro, Educational Time Sharing Representative, Computer Center, Asbury Park Board of Education, 1506 Park Avenue, Asbury Park, New Jersey 07712
Page 186

– Mr. Bob Osgoodby, Coordinator of Computer Services, Asbury Park School District. Asbury Park, New Jersey 07712

Session 525 – Ms. Jeanne Dussault, Career Education Resource Teacher, Carroll County Board of Education, 55 N. Court Street, Westminster, Maryland 21157
Page 201

– Ms. Bertie Pond, Career Education Resource Teacher, Carroll County Board of Education, 55 N. Court Street, Westminster, Maryland 21157

Session 623 – Mr. Earle Carr, Supervisor, Special Projects, Richmond Unified School District, 1108 Bissell Avenue, Richmond, California 94801
Page 119

– Mr. Harold Holt, Assistant Director, Career Development Center, Richmond High School, 1250 23rd Street, Richmond, California 94804

– Ms. Mary Jane Sheeran, Director of Secondary Curriculum and Career Education, Richmond Unified School District, 1108 Bissell Avenue, Richmond, California 94801

Session 722 – Mr. Robert Lathrop, Director, Career Education Center, Florida State University, 414 N. Monroe, Tallahassee, Florida 32301
Page 137

Resource People in the Classroom

Session 136 – Ms. Mary Ann Eagan, State Planning Coordinator, State Department of Education,
Page 32 State Office Building, Montpelier, Vermont 05602

– Mr. Walter Faulkner, Coordinator, Career Education, State Department of Education, State Office Building, Montpelier, Vermont 05602

– Mr. Robert Froel, Exemplary Projects, State Department of Education, Burlington, Vermont 05401

– Mr. John Greenan, Student, St. Johnsbury Academy, St. Johnsbury, Vermont 05819

– Mr. Kerry Keenan, Principal, Portland Street Elementary, St. Johnsbury, Vermont 05819

– Mr. George Stall, Exemplary Projects Director, State Department of Education, Montpelier, Vermont 05602

– Dr. John Vogelsang, Curriculum Coordinator for Career Education Project, Edmonds Jr. High School, Burlington, Vermont 05602

Session 238 – Ms. Dawne Friesen, Consultant to the Superintendent of Public Instruction, Toner and Associates,
Page 204 107 S. Main Street #25, Seattle, Washington 98104

Session 333 – Mr. Gregory Moo, Director, EBCE Program, Kodiak High School, P.O. Box 1516,
Page 186 Kodiak, Alaska 99615

Session 541 – Ms. Winnie Grant, Community Relations Supervisor, New York Telephone Company,
Page 202 10 Columbus Circle, New York, New York 10019

– Mr. Thomas F. Kane, Project Director, Office of Career Education, Board of Education, City of New York, 110 Livingston Street, Room 326, Brooklyn, New York 11201

– Mr. Joseph Kayal, Supervisor, Community Relations, New York Telephone Company, 10 Columbus Circle, New York, New York 10019

– Ms. Frances Low, Director, Open Doors, 20 W. 40th Street, New York, New York 10019

Session 737 – Mr. Douglas Hill, Director, Educational Resources Association, 83 E. Main Street,
Page 143 Newark, Delaware 19711

– Dr. John W. Reynard, Personnel Assistant, Employee Relations Department, Personnel Division, E.I. DuPont de NeMours and Company, Inc., 1007 Market Street, Wilmington, Delaware 19803

– Dr. Primo V. Toccafondi, Coordinator, Career Education Instructional System, Newark School District, P.O. Box 360, Newark, Delaware 19711

Session 836 – Mr. David L. Mallette, Consultant, Division of Science, North Carolina Department of Public Instruction, Education Building, Raleigh, North Carolina 27611

Sex Stereotyping in Elementary Schools

Session 505 – Dr. Elizabeth D. Koontz, Assistant State Superintendent of Teacher Education,
Page 100 State Department of Public Instruction, Education Building, Room 338, Raleigh, North Carolina 27611

Session 604 – Ms. Susan Groves, Coordinator, Women's Studies Program, Berkeley Unified School District,
Page 113 99 Plaza Drive, Berkeley, California 94705

Session 604 (cont'd.) – Mr. Theodore Woal, Supervisor of Vocational Guidance for Philadelphia District, Room to Grow Program, Stevens School, Room 104, 13th and Spring Garden Streets, Philadelphia, Pennsylvania 19103

Shadow Programs in Career Education

Session 246 – Mr. Charles A. Storms, Consultant, Critical Areas in Vocational Education, P.O. Box 67, Page 182 West Chesterfield, New Hampshire 03466

Session 544 – Mr. Ralph Hogan, Director, Governor's Honors Programs, State Department of Education, Page 203 Room 220, Annex, State Office Building, Atlanta, Georgia 30334

Session 742 – Mrs. Debbie Estey, Work Experience Coordinator, Administration Building, 8th and Cedar Street, Page 221 Rolla, Missouri 65401

– Mrs. Robelene Webb, Director, Career Education Project, Rolla School District #31, 8th and Cedar Street, Rolla, Missouri 65401

Simulation Techniques in Career Education

Session 337 – Mr. Robert L. Nelson, Owner of California Learning Simulations, 750 Lurline Drive, Page 187 Foster City, California 94404

Session 436 – Ms. Rose Mary Burger, Teacher, Language Arts Department, Andover Central School, Page 89 26 Dyke Street, Andover, New York 14806

– Ms. Lynn Griffiths, Andover Central School, 56 Sayles Street, Alfred, New York 14802

– Ms. Joyce Larson, Language Arts Teacher, 133 Hills Street, Wellsville, New York 14895

– Mr. David Porter, Fourth Grade Teacher, Palmiter Road, Alfredstat, New York 14803

– Mrs. Pam Serio, Career Education Coordinator, Allegany County Public Schools, 6 South Street, Belmont, New York 14813

– Ms. Pauline Weart, Career Education Coordinator, K-6, Cuba Central School, Cuba, New York 14727

Session 635 – Ms. Roxy Smarzik, Consultant, Career Education Project, Region X Education Service Center, Page 211 P.O. Box 1300, Richardson, Texas 75080

Session 736 – Ms. Rosella Bannister, Director, Michigan Consumer Education Center, 217 A University Library, Page 220 Eastern Michigan University, Ypsilanti, Michigan 48197

– Dr. Roger Niemeyer, College Community Coordinator, Michigan State University, 253 Erickson Hall, East Lansing, Michigan 48824

Staff Development Practices and Programs in Career Education

Session 125 – Ms. Candee Mann, Program Coordinator, Career Guidance Center, 201 Sunrise Highway, Page 172 Patchogue, New York 11772

– Dr. Vito Pace, Professor, State University College at Buffalo, 1300 Elmwood Avenue, Buffalo, New York 14222

– Mr. Donald Stanistreet, Director, Career Education Program, Syracuse City School District, Chenango Education Center, Syracuse, New York 13202

– Mr. Larry Swenson, Director, Career Guidance Center, 201 Sunrise Highway, Patchogue, New York 11772

Session 228 – Dr. John Thompson, University of Hawaii, Honolulu, Hawaii 96822

Session 325 – Mr. Robert Brennan, Executive Director, Greater Madison Chamber of Commerce,
Page 66 615 E. Washington Avenue, Madison, Wisconsin 53703

– Mr. George Maki, Principal, Marquette Middle School, 510 Thornton Avenue, Madison, Wisconsin 53703

– Dr. Ellen Meister, Madison Metropolitan School District, 545 W. Dayton Street, Madison, Wisconsin 53703

– Mr. Eugene Sturdevant, Principal, Lakeview Elementary School, 1802 Tennyson Lane, Madison, Wisconsin 53704

Session 423 – Dr. Marion Asche, Professor of Vocational and Technical Education, Virginia Polytechnic
Page 193 Institute, Blacksburg, Virginia 24061

Session 526 – Mr. Robert Adkison, Superintendent, CERES In-Service Model, 6th and Lawrence Street,
Page 201 P.O. Box 307, Ceres, California 95307

– Mr. John Avila, Director of Curriculum and Instruction, CERES In-Service Model, 6th and Lawrence Street, P.O. Box 307, Ceres, California 95307

– Ms. Marilyn Hildebrandt, Project Specialist, Pre-School Coordinator, CERES In-Service Model, 6th and Lawrence Street, P.O. Box 307, Ceres, California 95307

– Ms. Virginia Lish, Curriculum Specialist, CERES In-Service Model, 6th and Lawrence Street, P.O. Box 307, Ceres, California 95307

Session 624 – Mr. Maurice Flora, Coordinator, Career Education, Charter Oak Unified School District,
Page 120 19946 Rambling Road, Charter Oak, California 91724

– Mr. Kenneth Futterer, Director, Career Occupation and Vocational Education, Milpitas Unified School District, 480 Corning Avenue, Milpitas, California 95035

– Ms. Jo Kohler, Coordinator, Career Education, Chaffey Union High School District, 211 W. Fifth Street, Ontario, California 91762

– Ms. Nancy Pequeno, Vocational Specialist, Regional Occupational Program, Sacramento City Unified School District, 6125 Hillside Boulevard, Sacramento, California 95842

– Mr. Paul N. Peters, Manager, Career Education Unit, California State Department of Education, 721 Capitol Mall, Sacramento, California 95814

– Ms. Bobbie Stenton, Coordinator, Career Development and Work Experience Education, Marina High School, 15871 Springdale, Huntington Beach, California 92647

– Mr. Homer Sweeney, Director, Vocational Education, Fremont Unified School District, 4957 Eggers Drive, Fremont, California 94536

Session 723 – Mr. Benjamin Aune, Coordinator, Career Education Projects, Northfield Public Schools,
Page 217 Indiana School District 659, Northfield, Indiana 55055

– Mr. Steven Frantz, Coordinator, Career Resource Centers, South Washington Schools, Cottage Grove, Minnesota 55016

– Mr. Robert Lathrop, Director, Florida Career Education Center, 415 N. Monroe, Tallahassee, Florida 32301

Session 723 (cont'd.) – Ms. Elizabeth Neuwirth, Counselor, Hosterman Jr. High School, 5530 Zealand Avenue N., New Hope, Minnesota 55428

Session 823 Page 227 – Dr. Christopher Borman, Professor, Educational Psychology, College of Education, Texas A & M University, College Station, Texas 77843

– Ms. Sharon Colson, Staff Development Specialist, College of Education, Texas A & M University, College Station, Texas 77843

– Mr. Guadalupe Morales, Coordinator, Bilingual and Career Education, Region II Education Service Center, 109 N. Chaparral, Corpus Christi, Texas 78401

– Dr. Bennat Mullen, Professor of Secondary Education, Stephen F. Austin State University, Box 3010A, SFA Station, Nacogdoches, Texas 75961

Systematic Management of Career Education Programs

Session 124 Page 172 – Mrs. Mary Kay Albrittain, Guidance Counselor, Votex Center, Route 2, Box 75, Pomfret, Maryland 20675

– Ms. Anne Beusch, Foreign Languages Specialist, Box 8717, Baltimore-Washington International Airport, Maryland State Department of Education, Baltimore, Maryland 21240

– Mr. E.N. Carey, Education & Guidance Specialist, Box 8717, Baltimore-Washington International Airport, Maryland State Department of Education, Baltimore, Maryland 21240

– Mrs. Thelma Daley, Career Education Specialist, Baltimore County Public Schools, Towson, Maryland 21204

– Ms. Nannell Grube, Counselor, Lindale Jr. High School, First Avenue, Ferndale, Glen Burnie, Maryland 21061

– Mrs. Thelma Hill, Counselor, Largo Sr. High School, 505 Largo Road, Upper Marlboro, Maryland 20870

– Ms. Nancy Pinson, Specialist in Pre-Vocational Education and Career Development, Box 8717, Baltimore-Washington International Airport, Maryland State Department of Education, Baltimore, Maryland 21240

– Mrs. Virginia Rellihen, Counselor, Choptican Sr. High, Morganza, Maryland 20660

– Dr. Velma Speight, Administrator, Division of CUSP, Box 8717, Baltimore-Washington International Airport, Maryland State Department of Education, Baltimore, Maryland 21240

Session 323 Page 65 – Ms. M. Candice Pope, Career Education Specialist, Career Education for Tempe Area Students, 900 S. Mitchell Drive, Tempe, Arizona 85281

– Dr. Robert Wilburn, Career Education Director, Career Education for Tempe Area Students, 900 S. Mitchell Drive, Tempe, Arizona 85281

Session 524 Page 104 – Mr. John C. Shirley, Coordinator of Career Education, Region X Education Service Center, P.O. Box 1300, Richardson, Texas 75080

Session 622 Page 209 – Mr. Jack Fox, Principal, Orange High School, 525 N. Shaffer Street, Orange, California 92667

– Mr. Jack Sappington, Administrator, Special Programs, Orange County Consortium, 370 N. Glassell, Orange, California 92666

Session 622 (cont'd.) – Mr. Tom Schrodi, Coordinator, Career Education, Orange County Consortium, 370 N. Glassell, Orange, California 92666

Session 721 – Mr. Roland J. Cross, Assistant Superintendent of Schools, Oregon School District,
Page 217 200 N. Main Street, Oregon, Wisconsin 53575

Session 822 – Dr. James Robinson, Superintendent of Schools, 903 Washington Street, Cedar Falls, Iowa 50613
Page 156

Teacher-Advisor System

Session 440 – Dr. Richard White, Career Counselor, Leeward Community College, Pearl City, Hawaii 96782
Page 90

Teacher-Made Career Education Materials

Session 140 – Ms. Mary Remington, 519 E. Monroe, Pittsburg, Kansas 66762
Page 174

Session 341 – Mr. Gerald Eddlemon, Director of Career Education, Orange Public Schools, P.O. Box 1170,
Page 69 Orange, Texas 77630

– Ms. Ramona Peters, P.O. Box 87, Walnut Springs, Texas 76690

Session 641 – Ms. Sue Nishikawa, Media Specialist, Route 1, Leslie Drive, Warrenburg, Missouri 64093
Page 212

Using Television to Implement Career Education

Session 439 – Mr. Bill Perrin, Director of Field Services, Agency for Instructional Television, Box A,
Page 89 Bloomington, Indiana 47401

– Ms. DeeDee Sharpe, Coordinator, Program Research and Development, Georgia Department of Education, 1540 Stewart Avenue, S.W., Atlanta, Georgia 30310

– Mr. O. Max Wilson, Director of Instructional Resources, Georgia Department of Education, 1540 Stewart Avenue, S.W., Atlanta, Georgia 30310

Session 837 – Mrs. Norma Harrod, Media Consultant, 936 New York Street, Lawrence, Kansas 66044
Page 228

Using A Comprehensive Occupational Information System

Session 345 – Dr. Walter H. Cox, Director, Institute for Research and Development in Guidance,
Page 72 Indiana University, Bloomington, Indiana 47401

Session 646 – Mr. William M. Woolley, Director, Florida VIEW (Vital Information for Education and Work),
Page 213 411 West Boulevard, Chipley, Florida 32428

Session 743 – Mr. John Clyde, Director of User Services, Oregon Career Information System,
Page 144 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403

– Mr. Paul Franklin, Coordinator, Technical Assistance, Oregon Career Information System, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403

– Mr. Bill Manley, User Service Specialist, Oregon Career Information System, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403

– Dr. Bruce McKinlay, Director, Oregon Career Information System, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403

Session 743 (cont'd.) – Mr. Steve Wall, Director, User Services, Washington Occupational Information System, Evergreen Plaza, Olympia, Washington 98501

Values Clarification Techniques in Career Education

Session 243 Page 181 – Dr. Leslie Collins, Member, National Board of Directors, Association of American Indian Physicians, Capitol Towers 9-M, 1500 7th Street, Sacramento, California 95814

– Mr. Paul Imotichey, 1300 McGee Drive, Suite 103, Norman, Oklahoma 73069

Session 342 Page 189 – Mr. Clifford Garrison, Director of Student Development, Small College Consortium, 2000 P Street, N.W., Suite 900, Washington, D.C. 20036

– Dr. Paul Munson, Assistant Professor, Educational Planning and Development Program, Virginia Commonwealth University, Richmond, Virginia

Session 444 Page 195 – Mr. Robert Komerech, Project Director, Career Occupational Resource Center, Meridian School District #101, Mounds, Illinois 62964

– Dr. Don L. Sorenson, Associate Professor, Education and Psychology, Southeast Missouri State University, Cape Girardeau, Missouri 63701

Session 643 Page 124 – Dr. Dorothy Sisk, Director, Office of the Gifted and Talented, Department of Health, Education, and Welfare, 9th & D Street, S.W., Washington, D.C. 20202

Session 841 – Ms. Linda Cole, Project Counselor for Career Education, La Mesa-Spring Valley School District, 4750 Dale Avenue, P.O. Box 457, La Mesa, California 92041

– Mr. Bill Pitts, Project Supervisor for Career Education, La Mesa-Spring Valley School District, 4750 Dale Avenue, P.O. Box 457, La Mesa, California 92041

WOWEE: An Experience-Based Career Education Program

Session 204 Page 38 – Dr. Lewis M. Abernathy, Director, National Center for World of Work Economic Education, North Texas State University, P.O. Box 5397, Denton, Texas 76203

– Dr. Michael MacDowell, Executive Director, Illinois Council on Economic Education, Northern Illinois University, 222 Suburban Adis, DeKalb, Illinois 60115

– Dr. S. Stowell Symmes, Curriculum Director, Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036

– Mrs. Susan White, Associate Director, National Center for World of Work Economic Education, North Texas State University, P.O. Box 5397, Denton, Texas 76203

CLUSTER E – CAREER EDUCATION COMMUNITY RESOURCES

A Comprehensive Community Involvement Program

Session 848 – Mr. Art Eiffert, Design Engineer, Sandia Corporation, 5421 Rawlings Road, N.E.,
Page 163 Albuquerque, New Mexico 87111

– Mr. G.Y. Fails, Executive Vice President, Albuquerque Chamber of Commerce, 401 2nd Street, N.W., Albuquerque, New Mexico 87102

– Mr. Pete Gomez, Assistant Superintendent of Schools, Espanola Public Schools, P.O. Box 689, Espanola, New Mexico 87532

– Mrs. Betty Mae Hartman, Chairman, Education Committee, Chamber of Commerce, 500 Kentucky S.E., Albuquerque, New Mexico 87108

– Dr. Orval D. Hughes, Assistant Professor of Education, Education Department, New Mexico Highlands University, Las Vegas, New Mexico 87701

– Mr. Harvey Whitehill, Secretary-Treasurer, New Mexico Chamber of Commerce, P.O. Box 1395, Gallup, New Mexico 87301

– Mrs. Carol A. Whitlock, Junior High Level Reading Specialist, Santa Fe Public Schools, P.O. Box 1693, Santa Fe, New Mexico 87501

American Legion and the Legion Auxiliary Education Scholarship Program

Session 806 – Mrs. Anita Barber, State Coordinator of Career Education, Department of Education, 501 Dexter,
Page 150 Montgomery, Alabama 36130

– Mrs. Helen Montgomery, Past Department President, Alabama American Legion Auxiliary, 304 Conecutt Street, Greenville, Alabama 36037

Session 833 – Mr. Ronald C. Murphy, National Executive Committeeman for American Legion,
Page 160 6821 N. 58th Avenue, Glendale, Arizona 85301

Bottom Line for Business in Career Education

Session 405 – Mr. Ronald Coleman, Manager, Economic Education Relations Program, Montgomery Ward and
Page 77 Company, Montgomery Ward Plaza, Chicago, Illinois 60671

– Dr. Thomas Lombardo, Executive Director, Texas Council on Economic Education, University of Texas, Box 13318, Denton, Texas 76203

– Mr. Loring Stevenson, Regional Public Relations Manager, South Central Region, Montgomery Ward and Company, 6200 E. St. John Avenue, Kansas City, Missouri 64123

Career Counseling in a Nonprofit Agency

Session 603 – Mr. Leon L. Lerner, Executive Director, B'nai B'rith Career and Counseling Services,
7818 Liberty Road, Baltimore, Maryland 21207

Career Education and the Free Enterprise Movement

Session 248 – Mr. George Dibble, Vice President for Public and Government Relations, Husky Oil Company, P.O. Box 380, Cody, Wyoming 82414

– Mr. C.R. Rice, Manager, Employee Benefits, Husky Oil Company, P.O. Box 380, Cody, Wyoming 82414

Session 346 – Mr. Robert Lagrow, Vice President, Huntington Lagonda National Bank, P.O. Box 1127,
Page 73 Springfield, Ohio 45501

– Ms. Patricia O'Hanlon, Career Economic Education Coordinator, Willoughby Eastlake School District, 301 E. 293rd Street, Willowick, Ohio 44099

Session 648 – Mr. Michael Manahan, Manager, Community Relations, The Irvine Company, 550 Newport Center
Page 214 Drive, Newport Beach, California 92663

Career Education and the Human Services Movement

Session 447 – Dr. George F. Leonard, Professor, Guidance and Counseling, Wayne State University, 325 Education
Page 91 Building, Detroit, Michigan 48202

– Dr. Felix R. Sloan, Director, Career Guidance Project, Detroit Public School District, 8703 Colfax, Detroit, Michigan 48204

Career Education and the IPAR Program

Session 531 – Mr. Andrew Jacobs, Executive Director, IPAR, Weatherly Building, Suite 710, Portland, Oregon 97219
Page 106

– Mr. William A. Knouft, Principal, Madison High School, 2735 N.E. 82nd Avenue, Portland, Oregon 97220

– Mr. William J. Moshofsky, President, IPAR, c/o Georgia-Pacific Corporation, 900 S.W. 5th Avenue, Portland, Oregon 97204

– Ms. Catherine Williams, Career Education Coordinator, Madison High School, 2735 N.E. 82nd Avenue, Portland, Oregon 97220

Career Education Commitment of General Motors Corporation

Session 827 – Mr. Donald Mumford, Coordinator, Public Relations, Packard Electric Division, P.O. Box 431,
Page 157 Warren, Ohio 44487

– Ms. Mary Jane Taylor, Manager, Public Relations, Packard Electric Division, P.O. Box 431, Warren, Ohio 44487

– Mr. Michael Zockle, Coordinator of Career Education, Warren City Schools, 1619 Robbins #92, Niles, Ohio 44446

Career Education Efforts of Major Industries

Session 303 – Mr. Richard Arnold, Manager, Educational Relations, American Telephone and Telegraph,
Page 60 195 Broadway, New York, New York 10007

– Mr. Joseph Bertotti, Manager of Corporate Educational Relations, General Electric Company, 3135 Easton Turnpike, Fairfield, Connecticut 06431

Session 303 (cont'd.) – Mr. Willard D. Cheek, Manager, Educational Activities, General Motors Corporation, 3044 West Grand Boulevard, Detroit, Michigan 48202

– Mr. E.D. Redding, Vice President, Brown and Root Construction, Inc., P.O. Box 3, Houston, Texas 77001

Career Education: Utilizing the City as a School

Session 852 – Mr. Frederick J. Koury, Director, Career Education and City as School, New York City Board of
Page 165 Education, 59 Schermerhorn Street, Brooklyn, New York 11201

Chamber of Commerce in Career Education

Session 128 – Mr. Willie L. Catoe, Coordinator for Career Development, Columbia Chamber of Commerce,
Page 180 P.O. Box 1360, Columbia, South Carolina 29202

– Mr. H.D. Harris, Education Consultant, Lexington School District #2, 617 Indigo Avenue, Cayce, South Carolina 29033

Session 230 – Mr. G.Y. Fails, Executive Vice President, Albuquerque Chamber of Commerce, 401 2nd Street, N.W.,
Page 47 Albuquerque, New Mexico 87103

Session 327 – Mr. Luke W. Trahin, P.O. Box 2606, Morgan City, Louisiana 70380
Page 43

Session 425 – Mr. Robert Pittman, General Manager, Mississippi Economic Council, Box 1849,
Page 75 Jackson, Mississippi 39205

Session 529 – Mr. Isadore G. DiMaggio, Director of Career Education, Twin Cities Chamber of Commerce,
Page 106 777 Riverview Drive, Benton Harbor, Michigan 49022

– Mr. C. Frohman Johnson, Manager of Economic Affairs, Michigan State Chamber of Commerce, 501 S. Capitol Avenue, Lansing, Michigan 48933

Session 627 – Mr. Darrell Fouts, Businessman and Member, Board of Directors, Elk Grove Association of Industry
Page 209 and Commerce, Elk Grove, Illinois 60007

– Mr. Ralph Springer, Director of Urban Affairs Division, Chicago Association of Commerce and Industry, 130 S. Michigan Avenue, Chicago, Illinois 60603

Session 725 – Mr. Paul C. Livik, Director of Special Events, Akron Regional Development Board,
Page 139 1 Cascade Plaza, Akron, Ohio 44308

– Dr. William Nemec, Associate Professor, Coordinator for Public Schools' Career Education Workshops, University of Akron, Carroll Hall, Akron, Ohio 44325

– Mr. Jerry Ryan, Community Education Coordinator, Akron Regional Development Board, 1 Cascade Plaza, Akron, Ohio 44308

Session 824 – Mr. Donald F. Averill, Director, Career Education, Huntington Beach Union High School,
Page 227 5201 Bolsa Avenue, Huntington Beach, California 92647

Community Career Education Action Committees

Session 319 – Ms. Janet Beauchamp, Consultant, Arizona Education Association, 2102 W. Indian School Road,
Page 35 Phoenix, Arizona 85015

Session 319 (cont'd.) – Ms. Maxine Johnson, Community Resource Coordinator, Mesa Public Schools, 549 N. Stapley Street, Mesa, Arizona 85203

– Mr. John Komar, Career Education Specialist, Arizona Department of Education, 1535 W. Jefferson Street, Phoenix, Arizona 85007

Session 520 – Mr. Robert Myers, Manager, Salary Administration, Central Power and Light Company, Page 200 P.O. Box 2121, Corpus Christi, Texas 78403

Session 719 – Mr. Richard R. Lutz, Supervisor, Career Education, Division of Vocational, Technical, and Adult Page 136 Education Services, State of Washington, Olympia, Washington 98501

Executive High School Internship Program

Session 145 – Mr. Michael Angel, Senior, Sam Houston High School, Houston, Texas 77027
Page 36

Explorer Scouts in Career Education

Session 832 – Mr. Michael Clayton, Exploring Director, Boy Scouts of America, 1425 Wilburn Drive, Page 160 Oklahoma City, Oklahoma 73127

– Ms. Audrey F. Clough, National Director of Career Education, Boy Scouts of America, New Brunswick, New Jersey 08902

– Mr. Walter Friedman, National Director of Exploring Division, Boy Scouts of America, New Brunswick, New Jersey 08902

– Dr. Douglas Heesten, 153 Fierhill, Akron, Ohio 44304

– Mr. Gregory Holt, Director of Exploring, Exploring Division of Boy Scouts of America, 2145 S.W. Front Avenue, Portland, Oregon 97201

– Mr. Willie Iles, Jr., District Executive for W.L. Davis District, Boy Scouts of America, 1911 Bagby, Houston, Texas 77002

– Mr. John Miltner, Director of Development, Boy Scouts of America, 345 Hudson Street, New York, New York 10014

– Dr. Ivan Stafford, National Project Coordinator, Boy Scouts of America, New Brunswick, New Jersey 08902

– Mr. Ronald Walker, Director of Exploring Division, Boy Scouts of America, 5300 Glenwood Avenue, Minneapolis, Minnesota 55422

Federal Interagency Efforts in Career Education

Session 503 – Dr. Ben Burdetsky, Deputy Assistant Secretary for Employment and Training, U.S. Department of Page 98 Labor, 601 D Street, N.W., Room 10000, Washington, D.C. 20210

– Dr. George Pratt, Specialist for Education and Work, U.S. Department of Commerce, 14th and Constitution Avenue, N.W., Room 5519, Washington, D.C. 20230

– Dr. Justine Rodriguez, Special Assistant for Interagency Affairs, U.S. Department of Health, Education, and Welfare, 403 E. South Portal Building, 200 Independence Avenue, S.W., Washington, D.C. 20202

– Mr. Bruce Shertzer, National Advisory Council for Career Education, 1620 Western Drive, Lafayette, Indiana 47906

Getting Us Together: Business and Education

Session 727 – Ms. Victoria Calhoun, Staff Supervisor, Illinois Bell Telephone Company, HQ19C,
Page 139 225 W. Randolph Street, Chicago, Illinois 60606

Girl Scouts of America in Career Education

Session 734 – Ms. Phyllis Smith, Career Education Consultant, Wayne County Intermediate School District,
Page 33 Wayne, Michigan 48184

Industry-Education Councils in Career Education

Session 328 – Dr. Donald M. Clark, Career Education Administrator, Board of Education, 607 Walnut Avenue,
Page 67 Niagara Falls, New York 14302

Session 628 – Mr. Paul Peters, Director of Career Education, State Board of Education, 721 Capitol Mall,
Page 122 Sacramento, California 95814

– Dr. William Webster, Deputy Superintendent, State Board of Education, 721 Capitol Mall, Sacramento, California 95814

– Mr. Henry Weiss, Executive Vice President, Industry-Education Council, 1575 Old Bayshore Highway, Burlingame, California 95814

Session 726 – Mr. Donald Krotz, Industry-Education Labor Coordinator, Industry-Education Councils of America,
Page 217 State of California, 44 Monte Vista Road, Orinda, California 94563

– Mr. Bernard Novick, Associate Director, Career Planning and Continuing Education, Woodbridge Township School District, P.O. Box 428, Woodbridge, New Jersey 07095

– Mr. Robert R. Stewart, President, Arizona Business-Industry-Education Council, 631 E. 7th Place, Mesa, Arizona 85203

– Mr. Henry Weiss, Executive Vice President, Industry-Education Council, 1575 Old Bayshore Highway, Burlingame, California 95814

Session 826 – Mr. Bernard Novick, Associate Director of Career Planning and Continuing Education,
Page 157 Woodbridge School District, P.O. Box 428, Woodbridge, New Jersey 07095

Industry, Education, Labor: The Partnership

Session 352 – Dr. Ronald D. McCage, Director, Research and Development Section, Department of Adult,
Page 189 Vocational, and Technical Education, Illinois Office of Education, 1000 Woodside Road, R.R. #4, Springfield, Illinois 62707

– Mr. Paul B. Musgrove, Executive Director, Tri-County Industrial Education Council, 3818 N. Northwood, Peoria, Illinois 61614

Involving the Business Community in Career Education

Session 129 – Mr. Joseph Bertotti, Manager, Education Relations, General Electric Company, 3135 Easton
Page 29 Turnpike, Fairfield, Connecticut 06431

– Ms. Jan Gherardi, Assistant Principal, Penn Harris Madison School System, 55900 Bittersweet Road, Mishawaka, Indiana 46544

– Mr. Wayne Lanning, Counselor/Educator, Indiana University, 316 N. Jordan, Bloomington, Indiana 47401

Session 129 (cont'd.) – Mr. Calvin McIntyre, Coordinator, Career Education, Milwaukee Public School System, 5225 W. Uliet Street, Milwaukee, Wisconsin 53222

– Mr. Lewis Staum, Manager, Employee and Community Relations, General Electric Company, 301 N. Curry Pike, Bloomington, Indiana 47401

Session 330 Page 68 – Mr. John Avila, Director of Curriculum and Instruction, Ceres Unified School District, P.O. Box 307, Ceres, California 95307

– Dr. Jay R. Cummings, Project Director, Urban Career Education, Dallas Independent School District, Box 160, A. Harris Shopping Center, Suite 227, Beckley and Kerst, Dallas, Texas 75224

– Ms. Virginia Lish, Ceres Unified School District, Curriculum Specialist, P.O. Box 307, Ceres, California 95307

– Mr. Robert H. Milsted, Director, Career Planning and Placement, University of Houston, 4800 Calhoun, Houston, Texas 77009

– Mr. Charles A. Reinke, Jr., Senior Regional Recruiting Coordinator, Mobil Oil Corporation, Box 900, Dallas, Texas 75202

Session 427 Page 82 – Mr. Louis Cononelos, Project Director, Experience-Based Career Education, Highland High School, 2891 Katherine Circle, Salt Lake City, Utah 84109

– Dr. Kenneth L. Hennefer, Manpower Specialist, Utah State Board of Education, 250 East 500 South, Salt Lake City, Utah 84106

– Mr. J.D. Johnson, 3176 Joyce Drive, Salt Lake City, Utah 87109

– Dr. Donald Wright, Executive Director, Business-Industry-Community-Education Partnership, 1738 East 2700 South, Salt Lake City, Utah 84106

Session 532 Page 106 – Mr. Harry Krane, Supervisor, Industrial Arts, Center for Career and Occupational Education, New York City Board of Education, 131 Livingston Street, Brooklyn, New York 11201

– Ms. Marjorie W. Longley, Assistant to the Director of Consumer Marketing, The New York Times, 229 W. 43rd Street, New York, New York 10036

– Mr. Joseph Schachner, Director of Educational Activities, Gestetner Corporation, Gestetner Park, Yonkers, New York 10703

– Mr. Herbert Siegel, Director of Industrial Arts, New York City Board of Education, 131 Livingston Street, Brooklyn, New York 11201

Session 629 Page 210 – Mr. Truman Hill, Labor Relations Supervisor, The Firestone Tire and Rubber Company, P.O. Box 130, Russellville, Arkansas 72801

Session 728 – Dr. Jay Cummings, Project Director for Urban Career Education, Dallas Independent School District, Box 160, A. Harris Shopping Center, Suite 227, Beckley and Kerst, Dallas, Texas 75224

– Mr. Robert H. Milsted, Director, Career Planning and Placement, University of Houston, 4800 Calhoun, Houston, Texas 77009

– Mr. Charles A. Reinke, Jr., Senior Regional Recruiting Coordinator, Mobil Oil Corporation, Box 900, Dallas, Texas 75202

Session 830 Page 227 – Ms. Verna Barrett, Director, Career Learning Center, Breck School, 4200 W. River Road, Minneapolis, Minnesota 55406

Session 830 (cont'd.) – Mr. Jay Ettinger, Consultant, Career Education, St. Paul Public Schools, 360 Colburne Street, St. Paul, Minnesota 55102

– Mr. Don Friborg, Vice President, Division of Industrial Relations, General Mills, 4200 Wayzata Boulevard, Minneapolis, Minnesota 55440

– Mr. John P. Knievel, Supervisor of Educational Services, Northern States Power Company, 419 Nicollet Mall, Minneapolis, Minnesota 55401

– Mr. Dahrl Nelson, Project Administrator for Career Education, Career Education Resource Office, Fulton School, 4912 Vincent Avenue, Minneapolis, Minnesota 55410

– Dr. Phyllis Paul, Career Education Coordinator, Minnesota State Department of Education, Capitol Square Building, 550 Cedar Street, St. Paul, Minnesota 55101

– Ms. Carol Pomroy, Counselor, Minneapolis Public Schools, 700 22nd Avenue, N.E., Minneapolis, Minnesota 55418

– Mr. Dave Youngdale, Assistant Director, Project Responsibility, St. Paul Chamber of Commerce, Suite 300, Osburn Building, St. Paul, Minnesota 55102

Junior Achievement in Career Education

Session 733 – Mr. Roy Dangel, Executive Director, Junior Achievement for the Akron Area, Inc., 794 E. Tallmadge Avenue, Akron, Ohio 44310
Page 142

– Mr. Robert J. Roman, Executive Director of Curriculum and Junior High Schools, Toledo Public Schools, Manhattan and Elm, Toledo, Ohio 43608

– Mr. Thomas Rutter, Executive Vice President, Junior Achievement of Northwestern Ohio, Inc., 231 Huron Street, Toledo, Ohio 43604

Kiwanis and Career Education

Session 134 – Mr. John T. Forbes, Division Principal, Lawrence High School, 19th and Louisiana Streets, Lawrence, Kansas 66044
Page 31

Labor Unions in Career Education

Session 236 – Mr. John Burnell, Director, Office of Labor Relations, 250 Broadway, New York, New York 10007
Page 50

– Mr. Fred Koury, Director, City as School Program, 59 Schermerhorn Street, Brooklyn, New York 11201

– Mr. Morris Shapiro, Vice President for Vocational High Schools, United Federation of Teachers, 260 Park Avenue S., New York, New York 10010

– Mr. Michael Squeglia, President, Vocational Education Association, Eli Whitney Vocational High School, 257 N. 6th Street, Brooklyn, New York 11201

Session 335 – Mr. Larry Bell, Member, Central Labor Council, 2409 E. Bonita Drive, Scottsdale, Arizona 85253
Page 61

Session 432 – Mr. Wayne Crew, Manager, Computerized Career Counseling Center, Inc., 13751 Stroud Avenue, Kingsburg, California 93631
Page 87

– Mr. Edward Truman, Assistant to the President, American Federation of Musicians, Local 1417, 817 N. Vine Street, Hollywood, California 90038

Session 732 – Mr. Garland Ham, International Representative, United Auto Workers, Community Action Program,
Page 140 315 Parkview Drive, Arlington, Texas 76010

– Mr. Albert Lorente, Director, Education Department, United Auto Workers, 800 E. Jefferson Avenue, Detroit, Michigan 48214

– Mr. Harold O'Reilly, Education Director, United Auto Workers, Region #5, 11340 Hammack Drive, Bridgeton, Missouri 63044

– Dr. Mark Schulman, Assistant Professor of Communications, Antioch College, 414 N. Park Place, Yellow Springs, Ohio 45387

Session 831 – Dr. Claude Duet, Assistant Professor of Education, University of New Orleans, Department of
Page 159 Elementary and Secondary Education, New Orleans, Louisiana 70122

– Mr. Gordon Flory, Executive Vice President, Louisiana AFL-CIO, 973 Voortries Drive, Baton Rouge, Louisiana 70815

– Dr. John Newfield, Associate Professor of Education, Department of Elementary and Secondary Education, University of New Orleans, New Orleans, Louisiana 70122

– Mrs. Claire Rosenberg, Instructor, Office Administration, University of New Orleans, New Orleans, Louisiana 70122

Large Business and Industry in Career Education

Session 127 – Mr. Larry Nash, Community Relations Representative, Mountain Bell Telephone Company,
Page 28 c/o H.R. Stevens, 1512 Curtis, Room 200, Denver, Colorado 80202

– Mr. Howard R. Stevens, Colorado Staff Administrator for Education Relations Program, Mountain Bell Telephone Company, 1512 Curtis, Room 200, Denver, Colorado 80202

Session 229 – Mr. Howard Marshall, 414 Light Street, Baltimore, Maryland 21202
Page 179

– Mr. James Wilson, Director, Western Maryland Career Education Project, Box 730, Commonwealth Avenue, Washington County Board of Education, Hagerstown, Maryland 21740

Session 326 – Mr. Robert J. Lamphere, Senior Vice President, John Hancock Mutual Life Insurance Company,
Page 67 200 Berkeley Street, Boston, Massachusetts 02117

Session 424 – Mr. Norman Cartwright, Community Relations Manager, Public Relations Department, Ohio Bell
Page 193 Telephone Company, 425 Jefferson, Toledo, Ohio 43601

– Mr. Keith Wilson, Vice President for Public Affairs, Champion Spark Plugs Company, P.O. Box 910, Toledo, Ohio 43661

– Ms. Jama Roman, Career Development Program Coordinator, Toledo Public Schools, 2105 Gallier Drive, Toledo, Ohio 43611

Session 626 – Mr. Monroe Colston, Metropolitan Director for National Alliance of Businessmen and Manager of
Page 121 Urban Affairs for Chamber of Commerce, Des Moines Chamber of Commerce, 800 High Street, Des Moines, Iowa 50307

– Mr. Sig E. Jaastad, Member, Chamber of Commerce and Personnel Director, Northwestern Bell Telephone Company, 909 High Street, Des Moines, Iowa 50309

Session 724 – Mr. William J. Cook, Vice President, Hudson-Thompson, Inc., P.O. Drawer Q,
Page 138 Montgomery, Alabama 36105

– Mr. Earl Grabhorn, Education Director, Texas Midcontinent Oil and Gas Association, 10116 Trail Pine, Dallas, Texas 75238

– Mr. Robert Trebesch, Regional Personnel Director, Montgomery Ward and Company, 6200 E. St. John Avenue, Kansas City, Missouri 64123

National Alliance of Businessmen in Career Education

Session 426 – Dr. Bill Jessee, Professor in Counselor Education Division, 215 Education, University of Missouri
Page 81 at Kansas City, 5100 Rockhill Road, Kansas City, Missouri 64110

– Ms. Jerry Michael, 114 W. 11th, Kansas City, Missouri 64105

Session 530 – Mr. Louis C. Brown, 150 E. Market Street, Akron, Ohio 44308
Page 86

National Association of Life Underwriters' Role in Career Education

Session 805 – Mr. John W. Galloway, Assistant Public Relations Director, National Association of Life
Page 149 Underwriters, 1922 F Street, N.W., Washington, D.C. 20006

– Mr. Jim Hamilton, Chartered Life Underwriter, American General Life Insurance Company, P.O. Box 3288, Houston, Texas 77001

– Mr. Bruce C. Hendrickson, Immediate Past President, National Association of Life Underwriters, 1922 F Street, N.W., Washington, D.C. 20006

New York Life Insurance Company's Role in Career Education

Session 206 – Mr. Nathan Kelne, Vice President, New York Life Insurance Company, 51 Madison Avenue,
Page 40 New York, New York 10010

– Mr. Robert J. O'Connell, Assistant Vice President, New York Life Insurance Company, 51 Madison Avenue, New York, New York 10010

– Mr. Henry J. Stockmal, Jr., Career Education Coordinator, Stratfield School, 1407 Melville Avenue, Fairfield, Connecticut 06430

Rotary International and Career Education

Session 537 – Mr. Charles Bradshaw, Rotary Club Member, 3221 Ocean Drive, Corpus Christi, Texas 78404
Page 109

– Mr. James Nash, Rotary Club Member, 124 W. Third Street, Mansfield, Ohio 44902

– Mr. James A. Tarantine, Supervisor, Career Development, Mansfield City Schools, 53 W. Fourth Street, Mansfield, Ohio 44906

– Mr. Jon Young, President, National Ring Company, 1075 National Parkway, Mansfield, Ohio 44906

Small Business in Career Education

Session 126 – Mr. Donald Beck, Director, Corning Community Education Council, Parkway Facility,
Page 173 Corning, New York 14830

Session 126 – Dr. Allan Korn, Chairman, Consumer and Business Studies, State University College at Buffalo,
(cont'd.) 1300 Elmwood Avenue, Buffalo, New York 14222

Session 528 – Dr. W.C. Hannah, P.O. Box 278, Florence, Alabama 35630
Page 66

State Education Agency Personnel in Career Education

Session 121 – Mr. Roger Louden, Colorado Springs School District #11, 1115 N. El Paso Street,
Page 171 Colorado Springs, Colorado 80903

– Mr. Ted Wahler, Director, Career Education, Northern Colorado Educational Board of Cooperative Services, 830 S. Lincoln Street, Longmont, Colorado 80501

– Dr. Duane Webb, Executive Director, Colorado State Facilitator Project, 830 S. Lincoln Street, Longmont, Colorado 80501

Session 521 – Dr. James Eugene Bottoms, President, American Vocational Association, Inc. and Director, Division
Page 103 of Program Development, Georgia State Department of Education, 231 State Office Building, Atlanta, Georgia 30334

Session 618 – Dr. Jerry Booth, Director of Career Education, Nogales Arizona School District, 402 Martinez,
Page 117 Nogales, Arizona 85621

Volunteerism in Career Education

Session 220 – Dr. John Alden, Executive Director, National School Volunteer Program, Inc.,
Page 44 300 N. Washington Street, Alexandria, Virginia 22314

– Dr. Audrey H. Jackson, President, National School Volunteer Program, 1410 N.E. 2nd Avenue, Miami, Florida 33030

Session 418 – Mr. Jess Arnold, Manager, Community Interface, Space Division, Rockwell International,
Page 81 12214 Lakewood Boulevard, Downey, California 90241

– Mr. Jim Haun, Manager of Publications and Director, Advanced Career Training, Space Division, Rockwell International, 12214 Lakewood Boulevard, Downey, California 90241

– Mr. Harry W. Thomas, Manager, Community Relations, B-1 Division, Rockwell International, International Airport, Los Angeles, California 90009

CLUSTER F – CAREER EDUCATION CONCEPTS

Basic Concepts of Career Education

Session 249 – Dr. L. Sunny Hansen, Professor of Counseling and Student Personnel Psychology, University of
Page 53 Minnesota, 132 Burton Hall, Minneapolis, Minnesota 55455

Session 347 – Ms. Donna Martin, State Coordinator, Illinois Career Education Program, 100 N. 1st Street,
Page 72 Springfield, Illinois 62777

Session 547 – Mr. Norman R. Stanger, Director, Center for Care Studies, California State University,
Page 204 1250 Bellflower Boulevard, Long Beach, California 90840

Session 747 – Ms. Patricia Peterson, Teacher, Watertown Vocational, Technical, and Adult School,
Page 145 512 Dewey Avenue, Watertown, Wisconsin 53094

– Ms. Eileen M. Scott, Area Coordinator, Watertown Vocational, Technical, and Adult School, 512 Dewey Avenue, Watertown, Wisconsin 53094

– Ms. Rosemary Weyeneth, Teacher, Watertown Vocational, Technical, and Adult School, 512 Dewey Avenue, Watertown, Wisconsin 53094

Career Development: Focus For Curriculum Renewal

Session 703 – Mr. Alfred K. Gallagher, Supervisor of Pupil Services, Delaware County Intermediate Unit,
Page 132 State Building, Sixth and Olive Street, Media, Pennsylvania 19063

– Mr. Thomas Treacy, Career Counselor, Interboro High School, Sixteenth Avenue and Amosland Road, Prospect Park, Pennsylvania 19076

Career Development as a Part of Human Growth and Development

Session 845 – Dr. Ruth Ferguson, Chairman, Career Education Programs and Assistant Professor, Elementary
Page 229 Education Department, Pace University, Pace Plaza, New York, New York 10036

– Ms. Patricia Quinn, Teacher, Public School 41R, Clawson Street and Locust Avenue, Staten Island, New York 10306

– Ms. Grace Rosen, Teacher, Public School 229, 6725 51st Road, Woodside, New York 11377

– Mr. Martin Smith, Coordinator, Occupational Guidance Programs, New York City Board of Education, Room 422, 110 Livingston Street, Brooklyn, New York 11201

Career Education and Basic Education: Allies Not Enemies

Session 504 – Dr. Rita Bryant, Associate Professor of Education, Texas Eastern University,
Page 100 3900 University Boulevard, Tyler, Texas 75701

– Dr. James Gates, Executive Director, National Council of Teachers of Mathematics, 1906 Association Drive, Reston, Virginia 22091

Session 504 (cont'd.) – Mr. Charles Heatherly, Education Director, National Federation of Independent Business, 150 W. 20th Avenue, San Mateo, California 94403

– Dr. Wayne Teague, State Superintendent of Education, Alabama State Department of Education, State Office Building, Dexter, Montgomery, Alabama 36130

– Mr. George Weber, Associate Director, Council for Basic Education, 725 15th Street, N.W., Washington, D.C. 20005

Career Education and the Comprehensive Employment and Training Act

Session 705 – Mr. Joseph Davis, Planning Analyst, State Manpower Council, 30 W. Mifflin Street, Madison, Page 133 Wisconsin 53703

Career Education and the Goals of American Education

Session 649 – Dr. Dale Parnell, President, San Joaquin Delta College, 5151 Pacific Avenue, Stockton, California 95207

Career Education and the Legislative Process

Session 539 – Ms. Dorothy Alexander, Director, Division of Career Education, Kentucky Department of Page 111 Education, Capital Plaza Tower, Frankfort, Kentucky 40601

– Dr. John H. Alexander, Education Researcher, State Commission for Post-Secondary Education, Fort Boone Plaza, Frankfort, Kentucky 40601

– Mr. James Baker, Associate Superintendent of Public Instruction, Kentucky Department of Education, Capital Plaza Tower, Frankfort, Kentucky 40601

– Senator Kenneth O. Gibson, Chairman, Subcommittee on Program Implementation Oversight, Interim Joint Committee on Education, 228 Highland Drive, Madisonville, Kentucky 42431

– Dr. James Graham, Superintendent of Department of Education, 1719 Capital Plaza Tower, Frankfort, Kentucky 40601

– Representative Don W. Stephens, Chairman, Interim Joint Committee on Education, Kentucky General Assembly, Frankfort, Kentucky 40601

Career Education and a National Manpower Policy

Session 434 – Dr. Paul Barton, Senior Consultant, National Manpower Institute, 1211 Connecticut Avenue, N.W., Page 88 Room 414, Washington, D.C. 20036

Career Education: A Perceptive Perspective

Session 506 – Dr. Edwin L. Herr, Professor and Head of Department of Counseling and Educational Psychology, Page 101 Pennsylvania State University, 323 Carpenter Building, University Park, Pennsylvania 16802

Career Education and Vocational Education

Session 548 – Dr. Edwin L. Kurth, Professor of Education, Auburn University, 5024 Haley Center, Page 204 Auburn, Alabama 36830

Session 847 – Dr. Gerald O. Dudley, Director, Indiana Career Resource Center, 1205-09 S. Greenlawn Avenue, Page 163 South Bend, Indiana 46615

– Ms. Gina Lubek, Consultant, Career Resource Project, 3501 1st Avenue, Evansville, Indiana 47710

Session 847 (cont'd.) – Mr. Richard Morrison, Director, Student Services, Elkhart Area Career Center, 2424 California Road, Elkhart, Indiana 46514

– Ms. Kim A. Powers, Coordinator, Career Exploration and Guidance, Division of Vocational Education, 120 W. Market Street, 16th Floor, Indianapolis, Indiana 46204

Economic Education and Career Education

Session 247 and 744 Page 53 – Dr. Lewis Abernathy, Director, National Center for World of Work Economic Education, Box 5397, North Texas State University, Denton, Texas 76203

– Mr. George Dibble, Vice President, Husky Oil Company, P.O. Box 380, Cody, Wyoming 82414

– Attorney Roger Gielow, J.L. Wroan Construction Company, 1204 Elmwood Road, Bloomington, Illinois 61701

– Ms. Susan White, Associate Director, National Center for World of Work Economic Education, North Texas State University, Box 5397, Denton, Texas 76203

Session 247 Page 53 – Mr. Herb Mueller, President, North Valley Bank, P.O. Box 4008, Redding, California 96001

Economic Value of a College Education

Session 205 Page 39 – Dr. Garth Mangum, Director, Human Resources Institute, University of Utah, 413 Business Office Building, Salt Lake City, Utah 84112

Evaluating Process and Product in Career Education

Session 650 (See Page 35) – Mr. Gerald Johnson, Project Director, Project Future, Bremerton School District 100-C, Bremerton, Washington 98310

The Future of Vocational Education

Session 106 Page 23 – Mr. Frank Cannizzaro, Member, National Advisory Council on Vocational Education and Business Agent, Local 210, International Brotherhood of Teamsters, 345 W. 44th Street, New York, New York 10036

– Mr. Russell H. Graham, Member, National Advisory Council on Vocational Education and President, Coffeeville Community Junior College, Coffeeville, Kansas 67337

– Ms. Caroline Hughes, Public Sector Member, National Advisory Council on Vocational Education, 1000 South Howerton, Cushing, Oklahoma 74023

– Dr. Duane R. Lund, Member, National Advisory Council on Vocational Education and Superintendent of Schools, Staples, Minnesota 56479

– Mr. John Thiele, Chairman, National Advisory Council on Vocational Education and Director of Industrial and Community Relations, Whirlpool Corporation, South Jennylind, Fort Smith, Arkansas 92901

Higher Education, Career Education, and the World of Work

Session 803 Page 149 – Dr. David Gottlieb, Dean, College of Social Services, University of Houston, Houston, Texas 77009

– Dr. Don Mankin, Associate Professor, Studies of the Future, University of Houston, 2700 Bay Area Road, Houston, Texas 77058

– Dr. James O'Toole, Professor, Studies of the Future, University of Southern California, Center for Futures Research, Los Angeles, California 90007

Session 803 – Dr. Harold L. Sheppard, Senior Research Associate, American Institutes for Research,
(cont'd.) 1055 Thomas Jefferson Street, N.W., Washington, D.C. 20007

The Problem of Scope and Sequence in Career Education

Session 527 – Dr. Elvis Arterbury, Project Director, Partners in Career Education, 1201 N. Watson Road, Suite 730,
Page 105 Arlington, Texas 76011

– Dr. Bill Smith, Evaluator, Region X Education Service Center, Box 1300, Richardson, Texas 75080

– Mrs. Suzy Terral, Career Education Coordinator, Region VI Education Service Center, Huntsville, Texas 77341

– Dr. Jerome Weynand, President of the Colleges, San Antonio Union-Junior College District, 1300 San Pedro Avenue, San Antonio, Texas 78284

Report on the National Survey on the Current Status of Career Education

Session 804 – Dr. Donald H. McLaughlin, Research Scientist, American Institutes for Research,
Page 223 1791 Araspradero Road, Palo Alto, California 94302

Societal Problems and the Need for Career Education

Session 148 – Ms. Melba Till Allen, State Treasurer of Alabama, Capitol Building, Montgomery, Alabama 36104
Page 37

– Dr. Robert Anderson, Counselor/Educator, University of Alabama at Birmingham, Birmingham, Alabama 35233

– Dr. W.C. Hannah, Assistant Superintendent of Lauderdale County Schools, P.O. Box 278, Florence, Alabama 35630

– Ms. Ann Kelley, Elementary Principal, Spring Hill Elementary School, Elba Highway, 1008 Park Street, Troy, Alabama 36081

– Mr. J.B. Wier, Supervisor of Instruction, Pickens County Schools, P.O. Box 32, Carrollton, Alabama 35447